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BEYOND THE USUAL SUSPECTS: THE USE OF CITIZENS ADVISORY BOARDS IN ENVIRONMENTAL DECISIONMAKING

John S. Applegate [FN1]

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"Major Strasser has been shot. Round up the usual suspects." [FN1]

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Introduction

Ever since the collapse in the 1970s of the traditional model of administrative action, agencies, Congress, and the courts have struggled to define the proper role of the general public in administrative proceedings and the most effective procedures for implementing that role. Under the traditional model, as drawn by Richard Stewart in the celebrated *The Reformation of American Administrative Law*, [FN2] an agency neutrally and objectively resolves problems identified by Congress according to the policies set out by Congress. Where congressional policies are so general as to necessitate the exercise of a substantial degree of agency discretion (which turns out to be most of the time), the agency applies its substantive expertise to come up with the resolution that best serves the general *904 good. [FN3] This simple view of the world proved untenable in practice, and it was replaced by the "interest representation" (Stewart's term) or interest group pluralism model. According to interest group pluralism, the agency is essentially a broker, or harmonizer, of the many relevant interests and perspectives on problems within its jurisdiction, though it has a particular obligation to seek out underrepresented interests and

further the general "public interest" in its decisions. [FN4] Interest group pluralism remains the dominant model of administrative action, but it has recently attracted two challengers. One, the public choice school (itself an outgrowth of law and economics), takes interest group pluralism quite literally and views the agency's role as essentially that of a market in which various interest groups compete for favorable action. [FN5] The other, civic republicanism, largely rejects interest group pluralism and advocates administrative action that is guided by the agency's informed vision of the common good, following deliberation with interested parties in which they are encouraged to conform their particular interests to common goals. [FN6]

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This Article addresses the procedures for involving the public in environmental decisionmaking. The procedures parallel the political theory, but they are also influenced by other considerations. Thus, the traditional model of agency action adopted more or less elaborate versions of the basic technique of giving the public an opportunity to review and comment on agency-generated proposals before they were finally adopted. As attention moved to participation by public interest groups (as surrogates for the general public), procedures came into use that were designed to increase those groups' influence on agency decisions. The enhanced form of review-and-comment (sometimes referred to as "hybrid" rulemaking) is cumbersome, however, and in response to growing interest in alternative dispute resolution, regulatory negotiation grew to avoid the increasingly adversarial and technocratic nature of an elaborate (or "ossified" [FN7] review-and-comment process.

Regulatory negotiation also has serious drawbacks, however, most notably its narrow representation and its tendency to adopt dickered compromises. While this may meet the market-based expectations of public choice theorists, [FN8] interest group pluralists may well be concerned that this kind of bargaining does not result in the agency applying its independent view of the public interest. And it certainly fails to achieve the kind of public-minded deliberation that the civic republicans advocate. The focus of this Article, accordingly, is a more recent kind of procedure for public involvement in administrative decisionmaking, the citizens advisory board. Citizens advisory boards are an outgrowth of regulatory negotiation, which move away from rigid, expensive, adversarial resolution of environmental issues. They also respond to regulatory negotiation by expanding participation beyond a small group of insiders.

Part I of the Article describes in more detail the development of procedures for public involvement, from bare-bones review-and-comment, to hybrid procedures, to regulatory negotiation, to citizens advisory boards. The purpose of Part I is not only to place citizens advisory boards in their administrative law context, but also to identify the benefits and limitations of the technique in relation to other forms of public participation.

Part II describes in detail the elements of a successful citizens advisory board process. To make the discussion as concrete as possible-and to avoid undue romanticism in extolling the virtues of public deliberation [FN9] I will draw on the experience gained from the establishment and operation of a particular type of citizens advisory board. Site-specific advisory boards (SSABs), the brainchild of an interagency committee convened by the U.S. Environmental Protection Agency (EPA), have been widely deployed to address the remediation of environmentally contaminated federal facilities, in particular the nuclear *906 weapons production plants operated by the U.S. Department of Energy (DOE). [FN10] The EPA committee's immediate goal was to achieve greater public confidence in environmental decisions regarding the massive number and size of federal facilities that had been contaminated by

everything from run-of-the-mill industrial solvents to exotic poisons such as nerve gas and high-level radioactive waste. [FN11]

Part III returns to the review-and-comment and regulatory negotiation procedures. Citizens advisory boards complement, rather than replace, those procedures for public participation. Citizens advisory boards are more useful in some situations than in others. Nevertheless, some of the techniques for structuring citizens advisory boards can be readily transferred to their predecessors to enhance the four central qualities of a good public participation process: broad representation, openness, procedural fairness, and dialogue. Therefore, even where a citizens advisory board is not the best method for involving the public, the decisionmaker can choose from a menu of effective techniques.

I. Changing Paradigms for Public Participation

The rise of citizens advisory boards can be understood as the response, on the one hand, to the failure of basic and enhanced review-and-comment procedures to provide meaningful public participation in the administrative decisionmaking process, and on the other hand, to the failure of regulatory negotiation and other collaborative techniques to engage a broad range of participants. Using Lawrence Susskind's terminology, review-and-comment reflects a "paternalistic" model of public participation, in which the governmental experts are expected to make decisions based on their objective vision of the public interest. [FN12] While the opportunity to comment late in the decisionmaking process is open to all, dialogic or back-and-forth input from outsiders, to the extent that it occurs, *907 comes primarily from the equally expert persons who are regular participants in the regulatory process. Regulatory negotiation, in contrast, frankly acknowledges and seeks to manage conflicts in identifying the public good, but its range of input is limited to the relatively narrow group of actual participants in the negotiation. Properly structured, citizens advisory boards can embody the breadth of participation that review-and-comment permits and the direct communication that is the hallmark of negotiation.

A. Basic Review-and-Comment

The most common mode of public participation in administrative decisionmaking includes, in outline, three steps. [FN13]

First, the agency develops a proposal internally. This is typically the most lengthy part of the process, during which the agency seeks to reach a firm understanding of the issues and settle on a basic approach. There is often much back-and-forth within the agency and among agencies, including the Office of Management and Budget. This phase may also involve, on an ad hoc basis, consultation with the organized interests with whom the agency has an ongoing relationship. [FN14] Occasionally, broader input is solicited through an advance notice of a proposed action in the Federal Register. It is otherwise a closed process. These discussions are not typically designed to achieve broad agreement outside the agency.

Second, the full proposal is presented to the general public and comments of all kinds and from all quarters are solicited. The agency sometimes identifies particularly difficult issues and sometimes not, but there are no limitations on the subject, form, or source of comments.

Third, the agency revises the proposal in light of the comments, if it is so inclined, and publishes the final version.

This procedure is required by the Administrative Procedure Act (APA) for informal rulemaking, where it has the name "notice-and-comment rulemaking." [FN15] The term "review-and-comment," taken from a recent National Research Council report, [FN16] encompasses the similar way that many adjudicatory decisions are managed. Some form of review-and-comment is in fact used in virtually all proceedings that include public participation but do not require trial-like *908 procedures, ranging from the preparation of environmental impact statements [FN17] to forest management plans [FN18] to Superfund remedy selection. [FN19]

The review-and-comment paradigm is clearly capable of providing a quantitatively high degree of public participation in governmental decisions, [FN20] and it is certainly flexible enough to permit a free-flowing dialogue among citizens and government. [FN21] Nevertheless, in practice the three steps often amount to "decide, announce, and defend." [FN22] That is, the agency makes its decision internally, announces it to the public only nominally as a proposal, and then defends its proposal against criticism rather than seriously reexamining it in light of comments. [FN23] The Supreme Court in the Vermont Yankee litigation established a clear precedent for accepting as adequate both this minimal procedure and its resulting policies. [FN24] As a result, the scope of judicial review is too narrow to foreclose decide-announce-defend entirely. Moreover, even where the result is less preordained than decide-announce-defend suggests, it is widely recognized *909 that participation in the preproposal phase is most effective-and that is the phase least accessible to the public. [FN25]

B. Enhanced Review-and-Comment [FN26]

Both the courts and Congress reacted to the limitations of review-and-comment by adding to the procedures required in particular situations. In this they were following administrative law scholars who, in furtherance of the pluralist vision of agency decisionmaking, had advocated the use of "paper hearings" to supplement review-and-comment procedures. [FN27] In the initial phase of the Vermont Yankee litigation, for example, the District of Columbia Circuit addressed the public interest intervenors' argument that "the bare minima" of notice-and-comment rulemaking "denied them a meaningful opportunity to participate in the proceedings." [FN28]

Many procedural devices for creating a genuine dialogue on these issues were available to the agency-including informal conferences between intervenors and staff, document discovery, interrogatories, technical advisory committees comprised of outside experts with differing perspectives, limited cross-examination, funding independent research by intervenors, detailed annotation of technical reports, surveys of existing literature, memoranda explaining methodology. [FN29]

The court did not mandate any particular procedures, but it made it clear that something more than notice-and-comment was required. [FN30] The Supreme Court, however, reversed in a stinging rebuke that forbade courts from imposing additional procedures beyond those expressly required by Congress. [FN31] *910

While Vermont Yankee effectively brought judicial development of hybrid procedures to a halt, it could not curtail congressional innovation. Even before the Vermont Yankee decision, Congress had begun to provide for procedures beyond the review-and-comment minimum. The Clean Air Act, for example, requires the establishment of a rulemaking docket, detailed information about the agency's factual and scientific basis and reasoning, oral presentation of

views, response to public comments, and a host of other requirements-all nominally within the context of informal rulemaking. [FN32] Whether the additional procedures improve dialogue between the agency and the public is open to question, however. While procedures like public hearings can be a good opportunity for many people to hear presentations, to express their views, and perhaps to engage in question-and-answer sessions, they cannot provide the forum for extensive development of information, a shared baseline of understanding, and the development of a consensus. There is probably an inverse relationship between the size of the hearing and its communicative effectiveness. Well-attended hearings often respond to highly controversial proposals, and "venting" and defensiveness are the order of the day. Smaller hearings, in which genuine dialogue can occur, tend to be routine meetings attended only by "regulars." The pedestrian needs of simply setting an agenda and presenting information within a compressed time give the agency enormous influence over the meeting, and limits those holding opposing views to relatively disorganized presentations. [FN33]

In addition, extra procedures contribute to the adversarial tone of informal rulemaking, as their main practical use is to set the stage for future litigation. [FN34] They have certainly made it harder to promulgate rules that will survive judicial *911 review [FN35] and are often blamed for "ossifying" the decisionmaking process rather than increasing its flexibility and responsiveness. [FN36]

Remedy selection under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) [FN37] is an excellent example of the qualities and limitations of enhanced review-and-comment procedures. In the original 1980 version of CERCLA, Congress made a deliberate choice to focus clean-up decisions on technical issues [FN38] and limit delay in implementation by limiting public participation. [FN39] As a result, CERCLA practically mandated the decide-announce-defend version of the review-and-comment model by placing public participation in a narrow time frame after the remedial decision was made. [FN40] Subsequent EPA policy directives [FN41] and amendments to CERCLA increased opportunities for public participation along *912 the lines of hybrid rulemaking. They added a stage to the remedy selection process for a "proposed plan" which, like an environmental impact statement, analyzes alternatives and states a preference before final selection of the remedy. [FN42] An opportunity for oral and written comments, as well as public meetings at or near the facility, must be provided. [FN43] The final remedy selection (record of decision) is accompanied by responses to the public comments. [FN44] The National Contingency Plan (the regulatory framework for remedy selection and implementation) now requires a "community relations plan" to evaluate the community's information needs and respond to them, though it is not very detailed or prescriptive. [FN45] Technical assistance grants are also available to assist and educate local organizations. [FN46]

Nevertheless, CERCLA remedy selection often remains a decide-announce- defend process. [FN47] "Community acceptance" is a lightly weighted "modifying" factor in remedy selection, considered only after two "threshold" and five "primary balancing" criteria are accounted for. [FN48] Taken at face value, the term "modifying" is emblematic of the problem: "modification" can only occur after a course of action has already been developed. [FN49] That is, the preferred remedy has already been brokered between the agency and responsible parties, all of whom have the stake and technical expertise to participate effectively in these policy discussions. [FN50] By this point, time and resources have been expended and a *913 commitment has developed to the proposed plan. [FN51] This is underscored by the bipolar idea

of community "acceptance." The public is invited to take it or leave it, not to participate in the development of the remedy. Not only does this reduce public input to comments on decisions that have already been made, [FN52] but it also puts a premium on aggressive position-taking by the public. [FN53] Instead of asking the public to take responsibility for the hard choices that are typical of Superfund remedy selection, it encourages hard-line rejectionist positions as a way to "modify" the predetermined result. This mode of decisionmaking leads to impasse and anger, not good decisions. [FN54]

Experience has confirmed this interpretation of CERCLA. The Government Accounting Office (GAO) reported that many citizens believe that public participation is too late in the process to have an impact and does not involve enough community members. [FN55] In one Texas example, EPA was willing to meet only with members of the public who were associated with the responsible parties or were identified community leaders. [FN56] GAO also found that the public was either overwhelmed with large amounts of technical information or that information was very difficult to obtain, and EPA staff did not appear to take public comments seriously. [FN57] As one commentator has observed, the outreach program improves "public awareness but not public participation," [FN58] or, more colorfully, "'It's like they built a car and then at the end said, 'Oh, yea, we need to add a fin.''" [FN59]

In sum, the review-and-comment models, as exemplified by CERCLA, provide an opportunity for public reaction to agency proposals, but they do not draw the public into the decisionmaking process at a point at which they can be influential. As the new director of the National Wildlife Federation has noted, such narrow participation can be counterproductive in that it further alienates the public by considering only agency-defined problems and solutions. [FN60] This satisfies neither outsiders who want a seat at the table, nor insiders who are regularly faced with rejectionist posturing. *914

C. Regulatory Negotiation

The limitations of review-and-comment spurred the development of regulatory negotiation as an alternative framework that would circumvent procedural rigidity and permit a genuine dialogue among regulators, the regulated, and other interested parties. [FN61] Regulatory negotiation has been a staple of administrative law discussion for some time, [FN62] and it has been the subject of renewed interest as the result of recent efforts at regulatory flexibility. [FN63] It is most commonly associated with rulemaking, for which it has received the formal sanction of Congress [FN64] (following recommendations of the Administrative Conference of the United States [FN65]), but negotiation is also part of other kinds of decisions, such as *915 EPA's Project XL, which requires an extensive negotiation process in place of the traditional site-specific permitting. [FN66] Negotiation has frequently been used and studied for local environmental disputes like landfill siting. [FN67]

Proponents of negotiated rulemaking make a number of claims for it, the primary one being efficiency: it is a way to speed the slow pace of current rulemaking, encrusted as it is with hybrid procedures and the millstone of judicial review. [FN68] If the parties who would otherwise be likely to challenge a rule (affected industries, national environmental groups, etc.) agree to a standard, they are unlikely to seek its reversal in court. [FN69] Bringing the key parties to the table also addresses the chronically poor communication among them, and between them and the agency, allowing for a cheaper and faster decisionmaking process before the litigation phase. [FN70]

Better results are also claimed. Procedurally, the negotiation forum is conducive to cooperative, problem-solving behaviors instead of position taking. [FN71] This environment can also stimulate creative solutions that would not be thought of otherwise or which one side would be reluctant to present alone. [FN72] Substantively, dialogue allows the negotiators and agency jointly to identify all of the issues that need to be addressed.[FN73] The decisions, when made, can be better informed because the parties holding the information are at the table and are available to answer questions. [FN74] The resulting decision is thus better grounded in reality: it is feasible to comply with it and measure compliance, and truly unnecessary requirements can be jettisoned. [FN75]

Finally, proponents expect negotiated decisions to meet with better acceptance, not only as measured by the absence of judicial challenge, but also by voluntary compliance and political support. [FN76] A negotiation can provide the opportunity to understand and accept the trade-offs that must be made between goals. [FN77] Since ideological purity is not expected in the outcome of a negotiation, these trade-offs can be more easily accepted. [FN78] Moreover, negotiation gives those involved in the negotiation direct participation in the regulatory process and direct access to decisionmakers in a way that written submissions to proposals do not. [FN79] The opportunity for dialogue, explanation, and the creation of working relationships is thought to leave the affected parties more satisfied with the outcome, [FN80] and indeed EPA's experience has been largely positive. [FN81]

As far as they go, these claims are entirely plausible. In general terms, the values of negotiated as opposed to adversarial resolution are well known. However, negotiated decisionmaking also has some serious drawbacks, like the review-and-comment models. Most important, practicality demands a limited number of parties in any kind of negotiation. [FN82] It is difficult to identify the proper participants under any circumstances, [FN83] and the negotiation forum creates in *917 effect an incentive to include only readily identifiable groups in setting up the process. [FN84]

The issues usually are national in scope, so limiting participation to organized interest groups is a practical way to identify and convene a workable number of parties that are representative of those affected by the decision. In this sense, the process builds upon the pluralist traditions of the American political system. As with pluralism, however, the negotiation process excludes interests and people who are unorganized, usually at the national level. [FN85]

Moreover, negotiation requires that negotiators have a clear agency relationship with the groups they represent, and this also favors well- organized interests. [FN86]

As many commentators have emphasized, such groups are not necessarily representative of, nor are they accountable to, the public generally or to the general public good. [FN87] Grass-roots, local, or diffuse interests are difficult to identify in the first place, to limit in number, and to engage at a technically sophisticated level. [FN88] These are also the groups who are disadvantaged by a lack of resources. While this is a weakness in national negotiations, [FN89] it is fatal to use at a local level where the affected interests are typically unorganized, poorly resourced, and technically unsophisticated. [FN90] "Negotiation . . . is participation for *918 elites, for people whose job it is to represent interests that have a stake in the outcome of the process." [FN91] There can be little doubt, then, that regulatory negotiation as currently practiced in the federal government is most appropriate for organized interests operating at a national level. Indeed, it exaggerates the existing influence of well-organized interest groups on the

administrative process. [FN92]

It is generally agreed that the regulatory negotiation process is an open and fair one among the participants. [FN93] Even so, negotiated procedures perpetuate or even exaggerate resource and power imbalances among interested parties, [FN94] even if the procedures themselves encourage full participation by those who are invited. [FN95] Participation is thus no longer even formally equalized, as it is by written comments that can be generated by anyone. Rather, participation in regulatory negotiation requires the ability to furnish a technically adept representative at a central location. [FN96] Only a relative handful of interest groups can field such individuals on a regular basis, and only for them does the process promise anything like a level playing field. [FN97]

These practical requirements are likely to exclude even those smaller participants who are asked to participate. For them, negotiated procedures constitute an expensive additional layer of procedure, [FN98] since they do not do away with the review-and-comment opportunity of anybody to challenge the final outcome. [FN99] Thus, negotiation processes impose, in the words of one commentator, *919 "high entry costs on those concerned with the policy implications." [FN100] As a result, some critics have argued that regulatory negotiation by definition involves special interests only, as they are the only interests that are both readily identifiable and have the economic interest in intensive participation. [FN101] And as to those who have been excluded, the agency has a particular disincentive to change a negotiated proposal in light of their comments. [FN102]

Even more fundamentally, a successfully negotiated solution does not necessarily constitute a consensus on what constitutes the public good. The lack of a coherent vision of the public good is a central civic republican critique of interest group pluralism, as reflected in review-and-comment procedures. The problem is, if anything, exaggerated by regulatory negotiation. Negotiation tends to dispense with the idea that the agency is acting as the disinterested guardian of the general good, and with it any claim that the result is the "right" or "best" resolution. Rather, it is the solution that could be agreed upon. [FN103] Negotiation assumes that the problem is solvable by negotiable things, that is, that some trading and compromise can occur without sacrificing principles. [FN104] Critics of regulatory negotiation see it as little more than horse trading, log rolling, or any of the other metaphors for dickering among negotiators. [FN105] Furthermore, repeat players are likely to be motivated by a cooperative approach that maintains their status as players, and the pressure to cooperate may sacrifice protection of nonparticipants. [FN106] Under these circumstances, the agency's claim that it is acting *920 in accordance with the general public good, memorialized in its explanation of the decision, is unreliable, as William Funk has convincingly demonstrated in EPA's wood stove negotiation. [FN107] In this sense, in fact, it is a secret or opaque process, since the true reasons for the results reached may never be acknowledged.

Worse, negotiated solutions can really only be counted on to help the participants in the negotiation, the agency having in effect been captured by the negotiating group. [FN108] In the wood stove example, the real purpose of the industry's interest in a rule was to get protection from more stringent local standards for wood stoves. [FN109] Likewise, in a negotiation involving the standards of financial responsibility for loan servicers of student loans and the liability of servicers for program violations, the parties to the negotiation were apparently limited to the nominal parties to the loan regulations, that is, the Department of Education and the loan servicing agencies. [FN110] Even if the resulting regulations had operated to their mutual

satisfaction, they would not necessarily have operated to the satisfaction of the borrowers, for example, even though they (the borrowers) are the intended beneficiaries of the whole program. Moreover, the Department of Education agreed in advance to abide by the results of the negotiation unless it had "compelling" reasons not to. [FN111] Judge Posner was appalled: "The propriety of such a promise may be questioned. It sounds like an abdication of regulatory authority to the regulated, the full burgeoning of the interest-group state, and the final confirmation of the 'capture' theory of administrative regulation." [FN112] Since in USA Group Loan Services the negotiating parties included the regulated industry and not affected consumers, Posner's characterization was apt.

Negotiated decisions, then, are not designed to be particularly inclusive ones. In fairness, inclusiveness is not the primary motivation for regulatory negotiation. Rather, it is an insider strategy for more quickly obtaining more efficient and tractable regulations. From that perspective, there is much to be said for a process that allows direct communication among the technical experts on a given problem. Moreover, in dealing with problems of a national scope (that is, problems that have a uniform or highly scattered national impact), a relatively exclusive process may be the only practical alternative to review- and-comment. In sum, negotiated decisionmaking has undeniable strengths- particularly those of a dialogic rather than an adversarial mode of decisionmaking- and those *921 strengths can apply outside the context of the sophisticated participants in a formal negotiation. What is needed, then, in the words of one observer of Superfund, is "to create institutions that allow the public to be more actively involved in seeking cooperative risk management solutions." [FN113]

D. Citizens Advisory Boards

As a generic description, a citizens advisory board is selected by a sponsoring agency (or other entity whose actions are at issue) from among citizens who are interested in or are in some way affected by the agency. The appropriate constituency is most easily defined in decisions with a strongly local or regional [FN114] impact, and citizens advisory boards are most obviously suited to such controversies. The subject matter is limited to a particular activity or decision, designated at the outset, the outcome of which has not yet been determined. The members must be willing to approach the issues with an open (but not empty) mind. The process is deliberative, meaning that the essential activities are learning about the issues, candidly discussing reasons for and against various alternative solutions, and striving to reach a consensus resolution. This in turn requires active facilitation of the effort, not only in the sense of moderating discussion, but also in developing and presenting relevant information. Ideally, the discussions result in a consensus recommendation to the sponsoring agency. However, even if consensus cannot be reached, a successful citizens advisory board can narrow areas of disagreement, help affected parties recognize others' concerns and their bona fides, bring forward alternatives that had not previously been considered, and (if nothing else) elucidate the issues that remain to be resolved.

The structure and operation of a citizens advisory board is explored in depth in the next part of the Article. The foregoing sketch simply highlights the relationship of the citizens advisory board to its predecessors' limitations: inclusiveness, openness, procedural fairness, and dialogue. Citizens advisory boards can provide the breadth of input that characterizes review-and-comment. Like negotiation, a citizens advisory board consists of a defined and relatively small group, [FN115] so breadth must be achieved qualitatively in selecting members. *922 Membership is not characterized by representation of an organized group, but by the more

generalized idea of an identifiable interest that contributes to achieving a broad range of potentially affected interests. [FN116]

Unlike the negotiation model, the hallmark of a citizens advisory board is its transparency. All aspects of its operations and decisions must be open to inspection and understood by those not involved directly in the process. In addition, a deliberative process is well suited to issues that implicate conflicting values. [FN117] It is a truism of regulatory negotiation that it should not be used for disagreements that involve values and principles, as opposed to exchangeable commodities (like money). [FN118] This, however, severely limits its utility in almost every area of public debate, especially environmental issues. Thus a process that is capable of discussing values is an important addition to agencies' procedural options.

The federal government has a long history of assembling advisory boards of experts to make recommendations on important policy issues, either on an ad hoc or regular basis. [FN119] These are typically elite groups whose function is to supply special expertise for a technically complex problem. The expert advisory board is thus the virtual antithesis of broad public input, [FN120] but it provides a useful framework for developing broad-based, knowledgeable dialogue. By empaneling an advisory board, not of experts but of affected citizens, the agency can create a group dialogue that is informed about the key issues, yet includes a wider range of persons than would be represented in a negotiation.

Since an advisory board is not an extended exchange among sophisticated players, as in negotiated decisionmaking, the participants must be "brought up to speed" on the key issues. [FN121] The central problem of negotiated decisionmaking is not the idea of consensus-based decisionmaking, but the conflict between *923 broad representation and a knowledgeable membership. For all their other weaknesses in public participation, the 1986 Superfund amendments made an effort to resolve this tension by providing technical assistance to existing community groups to "level the playing field" between decisionmakers and the general public. However, the technical assistance grants program has not been very successful for a variety of reasons, including a daunting application process, restrictions on the amount and use of funds, and often hostile administrators. Thus it has not made any serious inroads into the rather bleak picture of Superfund public participation described above. [FN122]

Finally, citizens advisory boards can provide the deliberative, influential participation of regulatory negotiation. Unlike review-and-comment, citizens are given the opportunity to understand the technical issues, which is the basis for making informed and confident evaluations of technical issues. [FN123] Indeed, one basic goal of such boards is to create a forum for lay and technical people to work together with back-and-forth communication, instead of the usual didactic approach. [FN124] Unlike review-and-comment or a hearing where the public can only listen and react, the process is not a one- time-only exchange, but rather an opportunity for the public to be involved in the decision. [FN125] It is an opportunity to meet face-to-face with and personally persuade decisionmakers, which is not *924 available under review-and-comment [FN126] and that will be attractive to a wider range of stakeholders. [FN127]

Citizens advisory boards are ultimately about building trust among the participants, whether the divide is government-citizen, technician-layperson, or industrialist-environmentalist. [FN128] This in turn demands much of all of the participants. Substantively, the decisionmaker (sponsor) must accept and support the existence of such a group and be willing to accept its recommendations. [FN129] The corollary is that the decision has not already been made, [FN130] so that the final decision is truly collaborative. [FN131] As a process, advisory boards

are "time-consuming and resource- intensive." [FN132] But, *925

[t]he alternative is to ignore public perceptions and concerns, spending at least equivalent resources later in defending decisions already made against public opposition. If citizens are informed and involved from the outset, it is much more difficult for politicians to mobilize them, using their ignorance to turn inchoate concerns about powerlessness into opposition to a project that might have an acceptable benefit-risk ratio. Moreover, citizens for whom the issue is salient have time to master the subject; the more knowledgeable people become, the more likely they are to understand and accept many portions of technical risk analyses.

They can become emissaries to their communities. [FN133]

The sponsor's investment in time, money, and openness to its critics is repaid, in other words, in better-informed public participation, improved relationships, and greater acceptance of difficult choices.

Such boards have a fairly short history of use, on an ad hoc basis, and with mixed results. [FN134] They have been used to improve public input into several kinds of regulatory decisions, [FN135] such as the siting of hazardous waste facilities in Massachusetts, [FN136] Local Emergency Planning Committees set up under Superfund, [FN137] waste disposal planning in Germany and New Jersey, [FN138] chemical plant operations under the Chemical Manufacturers Association Citizens Advisory Panel program, [FN139] and river development in the Pacific Northwest. [FN140] While these programs differ in many respects, the boards offer the potential for filling the gaps in review-and-comment and regulatory negotiation. As noted, *926 these uses tend to be local or regional. Clearly, the task of identifying diffuse or unorganized interests is much easier in a local setting, and the incentive to reach a workable long-term solution may be greater given the focused impacts and existing relationships. It is important to recognize that, while citizens advisory boards have evolved from other procedures, they do not replace them. All four models of public participation can and should co-exist, to be deployed when appropriate. More important, as this Part and Part III demonstrate, each model can be improved by adapting strong points of the others.

II. Structuring a Citizens Advisory Board

While citizens advisory boards are capable of improving upon the review-and-comment and regulatory negotiation procedures, they must be carefully structured to be effective. Rather than discussing the characteristics of an effective citizens advisory board in the abstract, it will be more useful to focus on the concrete example of the environmental remediation of a former Nuclear Weapons Complex facility that employed an SSAB to advise on a particular set of decisions. The example is, I believe, generalizable, but its specificity also serves as a reminder that collaborative procedures must be tailored to individual circumstances.

A. Site-Specific Advisory Boards

The most extensive and systematic use of citizens advisory boards to date has occurred in DOE's Environmental Management program, which has the responsibility for cleaning up the environmental contamination left by half a century of nuclear weapons production, research, and testing.

It is difficult to appreciate the scale of what is now known as the Nuclear Weapons Complex unless one has actually viewed the vast, tumbleweed-tossed

plains of the Hanford Reservation; seen the tank farm at Savannah River where more than 50 underground tanks--each as big as the Capitol dome--house the high-level radioactive waste that inevitably results from plutonium production; or visited the area of east Tennessee, known as Site X during World War II, where the equivalent of the annual timber output of Minnesota was used to build what was then the largest roofed structure in the world. It is difficult, without seeing them, to imagine the huge concrete rooms known as "canyons" in which weapons-grade plutonium is chemically separated from other constituents in irradiated fuel elements behind thick protective walls, where the radioactivity is so intense that all work must be done by robotic manipulators.

The Nuclear Weapons Complex is an industrial empire--a collection of enormous factories devoted to metal fabrication, chemical separation processes, and electronic assembly. Like most industrial operations, these factories have generated waste, much of it toxic. The past 45 years of nuclear weapons production have resulted in the release of radionuclides to the environment. There is evidence that air, groundwater, surface water, sediments, and soil, as well as vegetation and wildlife, have been contaminated at most, if not all, of the Department of Energy (DOE) nuclear weapons sites. *927

....

Contamination of soil, sediments, surface water, and groundwater throughout the Nuclear Weapons Complex is extensive. At every facility the groundwater is contaminated with radionuclides or hazardous chemicals. Most sites in nonarid locations also have surface water contamination. Millions of cubic meters of radioactive and hazardous wastes have been buried throughout the complex, and there are few adequate records of burial site locations and contents. Contaminated soils and sediments of all categories are estimated to total billions of cubic meters. [FN141]

The cost of cleaning up these facilities is staggering as well. The clean-up of DOE's Cold War legacy may well cost \$265 billion by the time it is over, and that may not be for fifty or more years. [FN142] By comparison, this is about the same cost as all "orphan" sites that the Superfund must cover.[FN143]

With a history of secrecy and environmental misconduct, [FN144] DOE faced an almost total lack of trust when it began to address its clean-up responsibilities in earnest. To address DOE's lack of credibility, the (now defunct) Office of Technology Assessment recommended to Congress that DOE establish citizens advisory boards at its major sites to "foster [a] cooperative, consensual approach" to clean-up and to "provide [both] policy and technical advice" to DOE and its regulators. [FN145] EPA responded by establishing the Federal Facilities Environmental Restoration Dialogue Committee in 1992. Comprised of representatives of EPA, the major federal facility agencies, state regulators, tribal governments, local citizens groups, national environmental groups, organized *928 labor, and others, the committee sought to identify the sources of mistrust in federal facility clean-up and to suggest some remedies. [FN146]

The committee found that public participation in the environmental remediation of federal facilities under the applicable law, principally CERCLA, was limited by several obstacles. Not surprisingly, they echo the limitations of the review-and-comment paradigm:

Compounding the problem of late public involvement in decision-making is the lack of opportunity for meaningful dialogue in the formal comment and response

process used in the regulatory decision-making process. Some perceive there is a strong tendency for this process to serve the needs of agencies to defend decisions rather than incorporate common or insightful concerns into decision-making. Likewise, it does not allow for an interactive and substantive exchange that promotes better understanding and consensus- building. [FN147]

The conferees were concerned, in other words, that the public was involved only as an afterthought, once the "deal had been cut" between agency and regulators. Even when participation was made available, it was in a format that balkanized consideration of key issues and overwhelmed citizens with the sheer number of decisions to be made. [FN148] The existing fora for public participation were neither conducive to two-way communication nor to any real influence on decisions.

The EPA committee therefore recommended the establishment of SSABs, which it defined as independent public bodies established to provide policy and technical advice to the regulated and regulating agencies with respect to fundamental clean-up decisions. [FN149] The SSABs were to include both readily identifiable affected parties, and also unorganized "individual residents that live in the communities or regions in which [the] site is located." [FN150] They were to have clear missions, to be relatively small in size (ten to twenty persons), to include *929 governmental decisionmakers as nonvoting members, and to reflect the "full diversity" of views in the affected community and region. They were to be independent in identifying issues of concern and operations, and they were to attempt to reach consensus. Administrative and technical support would be provided by the government. [FN151] SSABs, in sum, fit firmly within the citizens advisory board model described above.

The SSAB idea had its first major workout at the DOE facility at Fernald, Ohio. Established in 1951 as the Feed Materials Production Center (it is now called the Fernald Environmental Management Project), the facility produced high-purity uranium metal for nuclear weapons until 1989. It is located seventeen miles northwest of downtown Cincinnati in an area dominated by agricultural and low-density (with the exception of a trailer park next door) residential development. The DOE property is about a mile square, so there is only a minimal buffer between the production facilities and neighboring properties. Storage silos containing extremely hazardous radioactive waste, for example, are only about one thousand feet from the site boundary.

A variety of chemical and metallurgical processes were used at Fernald for refining uranium metal from uranium ore and for the subsequent machining of the metal into usable forms. The resulting products were the feed material for other processes at other sites which produced fissionable material (e.g., U235 and plutonium) and ultimately nuclear weapons. The Fernald operations released into the environment, among other things, heavy metals, large amounts of acidic hydrogen fluoride, nitrogen oxides, and approximately one million pounds of uranium in liquids and as dust. Uranium is both toxic and radioactive: it is a heavy metal like lead or mercury, and while its own radioactivity is fairly modest, its daughter (the product of radioactive decay) is the potent carcinogen radon. Elevated concentrations of uranium can be found in the soils, surface water, and groundwater on the Fernald site and beyond its fenceline.

Though small in size by DOE standards, [FN152] Fernald established a national reputation as one of the first sites where the extent of the environmental mismanagement became known and was acknowledged by the government. Local residents sued DOE, and DOE was forced to pay out substantial damages for this contamination. [FN153] It was also sued by the

state of Ohio and ultimately paid fines to the state and agreed to state oversight of its waste disposal activities. [FN154] A *930 strong grass-roots citizens group formed to press for remediation of the site. Agreements negotiated with U.S. EPA and Ohio EPA (the site's regulators under CERCLA and RCRA, respectively) identified the principal decisions about the environmental remediation of the facility that needed to be made over a specified period of several years. The DOE managers at Fernald recognized that many of these decisions would have a profound impact on the local populace, and that their participation was essential to sound and broadly acceptable decisions that could be implemented without further litigation. Therefore, upon release of the EPA Dialogue Committee's Interim Report, DOE decided to establish an SSAB at Fernald.

The decisions that needed to be made were not easy ones, however. Returning Fernald to background or pristine conditions would require the disposal of tens of millions of cubic yards of radioactively contaminated soils and materials, probably in arid western locations whose residents would be no more enamored of next-door radioactive waste than Ohioans. Yet any decision not to excavate and transport less-contaminated material would have to take into account the interrelated issues of an on-site waste disposal facility, the future use of the site, acceptable levels of residual risk, and the efficacy of available waste treatment and disposal technologies. Moreover, these decisions had to be taken in the context of tight budget constraints, made tighter by efforts to balance the federal budget.

The members of the Fernald SSAB were selected by an independent convener, and the SSAB was formally established in August 1993 as the Fernald Citizens Task Force (Task Force). [FN155] The convener also recommended a chair for the Task Force and submitted a draft charter in consultation with DOE, U.S. EPA, Ohio EPA, and local residents. The charter identified four specific but far-reaching issues for the Task Force to address: the appropriate future use of the site (i.e., the post-remediation use), residual risk levels, waste disposition (on-site and/or off-site), and clean-up priorities. Together these amounted to a blueprint for the entire remediation project. The seventeen original members of the Task Force included members of local and national environmental groups, neighbors of the site, township and county government officials, representatives of the major trade union councils at the site, local businesspeople, health professionals, and area educators. Some were chosen primarily for their connection with important constituencies (e.g., environmental activists, labor, local government), whereas others were chosen more for their experience or expertise on the relevant issues (engineers, health professionals). Some connection to the site or area was the common denominator. The senior site officials of DOE, U.S. EPA, and Ohio *931 EPA were nonvoting members. The group was socially, economically, and educationally diverse. [FN156]

The Task Force began its work by establishing a general strategy for approaching the four issues in its mission and then hiring an independent technical consultant to assist in developing and presenting the information it needed. Consensus recommendations were issued in two parts: an interim report that covered future use and residual risk levels was issued in November 1994, and a full report that added waste disposition and clean-up priorities was completed in July 1995. On all of the issues, the Task Force sought a principled middle ground that ensured protection of human health while recognizing technological and fiscal constraints. Only the most intensive future uses of the site (residential and agricultural) are prohibited; residual risk levels protect the aquifer from further contamination but minimize surface disruption and waste generation; the aquifer is to be cleaned; the most dangerous waste will be transported off site, while

high-volume/low-risk material will be deposited in an engineered on-site facility; and an accelerated clean-up plan will reduce overhead costs quickly. [FN157] DOE estimates that the recommendations will save the taxpayers more than \$2 billion over the lifetime of the project. [FN158]

Fernald is, of course, unique in many respects. Some, like being a relatively small site with a readily identifiable public, made consensus easier to achieve. Others, like physical proximity to the surrounding population and an extremely contentious recent history, made it harder. The salient features of the Task Force process are nonetheless characteristic of the structural and operational issues that must be addressed in establishing a citizens advisory board.

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B. Threshold Issues

A citizens advisory board adds value to public participation in agency decisionmaking only if it is carefully planned and structured. [FN159] Early expectations about the function and role of the board play a decisive role in its public acceptance and its ultimate effectiveness. First, the sponsor should develop a full understanding of the issues requiring resolution and determine that a citizens advisory board is the proper process to use. Second, the sponsor needs to define the role that the board will play in reaching decisions on those issues. Third, the sponsor must establish a broadly acceptable process for identifying the board members and leadership. Each of these choices may be modified as the process unfolds, but it is the initial configuration that will attract (or not) a broad spectrum of participants who want to make the board a success.

1. Determining the Need

Before proceeding, it should be clear that a citizens advisory board is the best way to obtain public input into the specific decisions facing the sponsor. The existence of a decision is crucial: citizens advisory boards are for advising on decisions, not monitoring or being a board of directors. Decisionmaking needs are determined by the substantive issues requiring resolution and the time within which they are to be made. Timing is critical. If the board is to be an active part of the decisionmaking process, and not just for reviewing and commenting, it must begin its involvement before a formal public proposal is made. There must be some flexibility in the schedule (several months at least) to give the board time to get organized, learn its business, and reach conclusions.

At Fernald, there were many issues requiring public involvement, but not all were appropriate for the SSAB process. Review-and-comment in the context of existing fora and relationships, together with informal opportunities for obtaining more information, already served the public's needs with respect to some decisions. Thus, an imminent decision on the best technology for treating highly radioactive ores at the site appeared at the time to fail the criteria for establishing a citizens advisory board. There was little time to learn and explore the issues, and the preferred technology (vitrification, or glass- making) seemed both feasible and clearly superior in environmental performance. Therefore, the Task Force passed the issue by. Three years later, when unexpected problems arose with vitrification and the site had to go back to the drawing board, [FN160] the Task Force took up the issue because there was then sufficient lead time to study it, and the proper remedy was no longer a fairly clear technical choice. *933

Controversial, big-picture issues such as waste disposal and residual risk levels, on the other hand, are fundamental choices that involve complex interactions of technical considerations

and sociopolitical values. [FN161] For such issues, full information and dialogue are essential for public acceptance, so a citizens advisory board is a good way to enable the sponsor to work directly with the community to discuss and develop the public concerns and appropriate technical alternatives. Future use is a good example. The use to which a Superfund site will be put after remediation is a fundamental determinant of the site's residual risks and hence of the legal remediation goals for the protection of human health and the environment. [FN162] Future use, however, depends heavily on local expectations for the current character and development of the area, [FN163] because plans for residential development will hardly work if no one will live there, and industries will not flock to a poorly placed industrial park. Future use, then, was a good subject for the Fernald SSAB. In contrast, fine-tuning excavation plans or treatment techniques can swallow up the time and energy of SSAB members without addressing the overall goals of remediation that most *934 concern the general public. For such issues, review-and-comment can elicit the views of the interested public. A citizens advisory board, keep in mind, adds to and works with-it does not supplant-existing methods for stakeholder input. [FN164] Together, they can provide information, deliberation, and ready opportunities for participation.

A citizens advisory board must be appropriate not only for the relevant issues, but also acceptable to the relevant people. The citizens who are already active in the issues must be ready for a citizens advisory board. It will not advance public confidence to try (or appear to try) to replace existing stakeholder groups with new ones. The official decisionmakers must be ready for a citizens advisory board, too. Fernald's managers saw an SSAB as a way to assist in addressing several extremely controversial and complex issues that were looming on the horizon, and senior management made its commitment clear so that all levels of the organization were willing to work directly with the Task Force and its members. This built the foundation for the free flow of information and ideas, which in turn built credibility and trust at the working level. These comprise much of the value of the advisory board process.

2. Establishing the Role

Many groups and individuals will have views on the proper purpose of the citizens advisory board, and the sponsor must work closely with its stakeholders to develop a common vision of the role of the board in the relevant decisions. [FN165] A board's effectiveness and credibility depend ultimately on its ability to work within a clearly defined and broadly accepted role in the decisionmaking process. This requires a clear substantive mission (at Fernald, the four issues identified in the charter) that defines the objectives of the citizens advisory board and channels its work into the areas where it can be most helpful and influential. If the board is convened around a particular facility, for example, the mission should be site-specific in the sense that the issues can be resolved locally. [FN166] As with regulatory negotiation, unless all relevant interests are at the table, the decisionmaking process reverts into a petition process.

A well-defined mission focuses the efforts of the board and provides a continuous sense of progress and achievement. Boards may wish to adjust the initial scope with new issues that individual members bring to the table, but they should be aware of three risks in doing so. First, too many issues will bog the board down-though this does not preclude deferring consideration of the supernumeraries to a later time. Second, volunteers have a limited amount of time *935 to devote to the board, so the work load must remain manageable. Third, advice is most likely to be influential in the areas in which it has been requested. This is emphatically not a

take-it-or-leave-it approach to issue selection. Rather, all parties should realize that the board will be most effective in addressing the most pressing issues. Again, there is no reason that the list of issues cannot evolve, both as circumstances change and as the board gains more insight into the situation. In fact, one important benefit of citizens advisory boards is a new perspective (or, rather, several new perspectives) on the definition of issues.

The board's role vis-a-vis the sponsor and regulators should be clear. Citizen members must understand at the outset that their advice is valued, but they must not be misled into believing that they have ultimate decisionmaking authority. Conversely, since government officials are the legally designated decisionmakers and since they rarely have (or should have) the power to redelegate that authority to others, [FN167] no recommendations will be very effective without their involvement and concurrence. Their active participation also helps to ensure that the board will be involved early in the decisionmaking process. The governmental decisionmakers must, therefore, be board members *ex officio*, that is, their membership is mandatory. However, consistent with the advisory status of the board and the officials' obligation to make their own decisions and listen to all equally, they should be nonvoting members. Nonvoting status should not be an excuse for passive membership. Active participation in the board's deliberations is the *sine qua non* of a dialogue. Moreover, as Robert Reich has forcefully argued, it is a central function of government to engage interested citizens on matters of public concern. [FN168] To make informed and realistic recommendations, the public needs to understand the officials' expertise, knowledge, and perspective, as well as the legal and budgetary constraints under which the officials are operating. The board may wish to challenge those constraints, but it should not do so in ignorance of the relative difficulty of having such a recommendation implemented.

3. Convening

The process for convening a board sets the tone for its overall effectiveness. The main goals of the convening process at Fernald were to create a board that represented the range of stakeholder interests at the site, whose members could work effectively together to make recommendations, and which could meet a tight timetable for regulatory decisions. As a result, stakeholder self-selection or *936 tiered selection processes, which have been used in other contexts, [FN169] were avoided. Instead, to balance the needs for representation and speed, DOE hired an independent convener who would select a broad-based membership, identify a neutral chair, and draft a charter stating the basic mission and procedures. [FN170] Eula Bingham, a former head of the Occupational Safety and Health Administration and now a professor of environmental health at the University of Cincinnati, was retained by DOE to serve as the convener. She was an excellent choice because she was clearly independent of DOE and was widely respected in the community, yet she had the political experience to be able to "read" the community to identify groups that needed to be represented and individuals who could work together. To emphasize her independence, DOE accepted her recommendations in full. Moreover, once the convening process was complete, Bingham, by design, had no further role in the board or the site, allowing the Task Force to function on its own.

To assure a forum that is conducive to open discussion rather than formal presentations, a citizens advisory board must be limited in size. The Task Force was limited to fifteen members before the convening process began, which resulted in some difficult choices. But such choices are inevitable; not everyone who wishes to can be afforded a spot on a citizens advisory board,

though omissions that later become apparent can be redressed. [FN171] Here again, the retention of other forms of public participation is essential to allow input from individuals and groups who are not members of the board.

Since citizens advisory boards are charged with making important recommendations on major issues, it is indispensable that they represent a broad spectrum of concerns and interests. [FN172] Where the issues have geographical boundaries, location of residence, workplace, or recreational use will have a preeminent place in membership selection, as will representation of the relevant local governments. Persons with a preexisting commitment to the issues (e.g., activist groups) must also be identified. In addition, the membership should reflect the demographics (ethnicity, socioeconomic status, occupation) of the affected communities. It is obviously impossible to specify the exact composition of a board in advance, but such a balance should be the ideal which the convener *937 seeks to approximate. Exclusion, especially if deliberate, of any substantial segment of the community undermines the entire process. [FN173]

It has been noted in the context of regulatory negotiation that persons who are interested enough to participate are, almost by definition, special pleaders. [FN174] That is, persons whose interest is well-enough defined to be part of a negotiation have some specific interest in the outcome-as a potentially regulated business, as an employee of such a business, or as the employee or agent of an organized interest group-that coincides to a degree with the broader public interest, but not entirely so. This is largely inescapable: relatively few people are sufficiently motivated to take the time and energy to master a subject in which they have only a passing interest. People need a "stake," though not necessarily an economic one, to make a substantial commitment to an issue; conversely, those without a stake may not give the subject the attention it requires. [FN175] Citizens advisory boards, which are not bound by the "agency" requirements of a formal negotiation, can temper the problem of self-interest by searching for individuals who are willing to commit the time, but who are not affiliated with specific organizations. At CERCLA sites, for example, neighbors are an obvious source of such persons, as are individuals in the business community whose own business is not directly affected or environmental groups that focus on related issues.

Convening is, in the end, as much an art as a science. Two elements are essential: that the process be open and widely perceived as fair, and that all stakeholders be able to identify with one or more members of the board as it is finally constituted. Recognizing that perfection is impossible and that omissions can be relatively easily remedied by adding members, meeting these two goals assures that the selection process will give the citizens advisory board the foundation in the community that it needs to be successful.

C. Implementation

The implementation of a citizens advisory board requires the integration of several elements. For clarity, I will group them into the elements that involve the individuals who comprise the board ("people") and the elements that involve its operations ("process"):

People	Process
1. Cooperation	4. Information
2. Leadership	5. Fairness
3. Commitment	6. Transparency

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The categories overlap, of course, but more importantly they are mutually reinforcing. Careful attention to one element supports the others.

1. Cooperation

To move beyond the review-and-comment paradigm, a citizens advisory board must work cooperatively to reach its recommendations. Its members must be actively interested in tackling difficult issues, and they must be willing to work with persons with different backgrounds and points of view. Some individuals and groups prefer an outsider status to preserve their ideological integrity, because they regard cooperation as co-optation. [FN176] A citizens advisory board, however, requires a commitment to collaborate. There is no way around that commitment, and persons who cannot participate on that basis are welcome as observers but will not be productive members of the board itself. It should go without saying that the sponsor has a responsibility, much as it may be against its short-term interest, to ensure that collaboration is not co-optation.

To free members to work closely with each other, it helps to decide at the outset that each member's views are his or her own and do not bind his or her organization, if any. Individual rather than organizational participation does not mean that members leave their views and experience at the door—they have been chosen, after all, for their views and experience—but only that the rigidities of agency and authority are removed. This also frees organizations to support the citizens advisory board process, since they do not need to forego their institutional independence to participate. Citizens advisory boards, to repeat, do not negotiate to a binding result; they render advice. The advice is influential (or not) based on its reasoning and the breadth of perspectives that go into it, not on binding *ex ante* commitments to follow it.

It may also help to engage the board in team-building exercises and to have a third-party professional assist in these activities. Many of the members of the board will not have known each other previously, and others will have preconceptions of each other based on background and position in the community. These barriers need to be broken down so that members can develop effective relationships with each other and as a team. To save time, the process of developing ground rules can perform this function, though some groups have found that these preliminaries provoke more problems than harmony. In any event, team-building should be an ongoing activity. All of the board's interactions should be designed to allow for maximum personal contact among members. [FN177]

It should also be stressed that membership is a responsibility. In addition to regular and active attendance, members must avoid financial conflicts of interest. The credibility of the board and its members is every bit as important as the credibility of its sponsor in achieving real results. Board members should not *939 have a direct financial interest in the outcome of the board's deliberations, [FN178] nor should they receive direct financial benefit from the activities of the board. Likewise, direct compensation for members' participation should be avoided, except where absolutely necessary to assure the participation of a particularly important point of view, [FN179] and the board's paid staff should not be board members. It is much better for the board to meet outside of the workweek and otherwise ensure that membership is not a financial hardship. Participation is inevitably a personal sacrifice, but it should be apparent that it is being done out of concern for the future of the community and not personal gain.

2. Leadership

Active leadership is critical to an effective citizens advisory board. At the early stages, this leadership will have to come from the sponsor who identifies the need for a board, works with stakeholders to develop a structure and convening process, and facilitates initial implementation. The sponsor has a strong role in setting the overall goals of the board and pointing it toward the areas where its recommendations will have the greatest impact. Once the board is assembled, its chair and other officers must assume the leadership role.

There are many activities and much planning that must be coordinated and managed to organize the board's work and make progress. A good staff is essential, but the staff must be closely supervised by the chair, who is a member of the board itself. A citizens advisory board derives its value and its credibility from being a citizens advisory board. If it is or appears to be the creature of a professional staff, its effectiveness is limited to the authority and representativeness of that staff.

The chair's most important job is to facilitate the board members' participation and the board's effectiveness by developing a clear plan for reaching decisions and ensuring that all members of the board have the necessary level of understanding of the issues to participate meaningfully in those decisions. It is helpful to have a detailed work plan of short-term objectives that take the group from orientation to decisions on specific issues. The work plan acts as a benchmark for board members and for the general public to measure the board's progress, and it increases the transparency of the board's activities. Charting the course for the board is not the same as leading it to a particular point of view, however. [FN180] The chair must ensure that all sides of the issues are heard and *940 evaluated within the board's deliberations. He or she needs to be able to put aside personal opinions, listen to all sides with an open mind, and encourage (preferably by example) other members to do the same. The individual should be committed to finding a common ground, but not to a preexisting position.

3. Commitment

The board members' most important commitments are regular and active attendance and collaborative work toward consensus. A matching commitment must be made by the sponsor and the official decisionmakers to support the board's work and to use its recommendations. They must understand that a citizens advisory board is not a rubber stamp, and they must be prepared to take actions that they had not previously planned or that are contrary to existing expectations. The legal commitment that the official decisionmakers can properly make to use a citizens advisory board's recommendations is necessarily limited. It is a fair criticism of existing processes that the decisionmaker in the review-and-comment models is free to give too little consideration to others' views, that is, the decide-announce-defend version. But regulatory negotiation may give too much. The agency constrains its independent judgment of the public good by announcing in advance that it will support the results of a negotiation, as has sometimes occurred. [FN181] The Negotiated Rulemaking Act of 1990 clearly states that the agencies can negotiate proposed rules; [FN182] the promulgation of final rules is the responsibility of the agency alone.

On the other hand, without some extra governmental commitment, it is unlikely that members of the public will be very attracted to the extra time commitment of a citizens advisory board. Without impairing its independence, a governmental decisionmaker can certainly agree to participate in deliberations and to use the recommendations, that is, to study them, to incorporate

as much as possible consistent with the public interest and good regulatory judgment, and to report back to the board on the fate of the recommendations. Accordingly, at the time of establishment, the board should obtain letters from senior decisionmakers that commit to providing fair, accurate, and timely responses to information requests; to arranging the decisionmaking schedule to ensure meaningful input; to working actively to reach a consensus within the board; to considering carefully all recommendations; and to explaining in detail variances between the final *941 decision and the recommendations. It is up to the sponsor to ensure that the board is integrated into the earliest phases of the decisionmaking process. This requires establishing regular meetings and communication to assure that decisions are not taken before the board has an opportunity to understand and make recommendations on them. The sponsor must also be committed to providing timely and accurate information in the format requested. This kind of support will correlate directly to the ability of the group to develop timely and responsive recommendations. In fact, the sponsor's credibility will be built on its responsiveness. These items represent, in any event, little more than the APA, [FN183] the Freedom of Information Act, [FN184] and CERCLA [FN185] already demand, but the moral commitment and prompt compliance are powerful indications of an intention to work collaboratively.

An altogether more tangible commitment of resources is required as well. A citizens advisory board requires an administrative and technical staff for several reasons, the most important of which is the preparation and presentation of information. There are a number of options for procuring this support. The board can hire a dedicated full-time staff to handle all support activities, it can hire consultants to provide specific services, [FN186] or it can use existing sponsor staff. The Task Force used a combination of all of these approaches, in different roles and at different points in its work. The most sensitive tasks-the development and presentation of information-were assigned to an independent consultant with an appropriate technical background and experience. For other functions (e.g., meeting logistics, mailings, clerical work, etc.), cost-effectiveness was the primary consideration. Nevertheless, a citizens advisory board is very resource intensive and requires substantial funding by its sponsor. [FN187] This clearly limits the appropriate use of such boards to large or highly controversial activities that would justify such an investment. [FN188] The return on the investment should not be underestimated. Even a substantial up-front investment in an advisory board can save much more in later legal expenses and delays. [FN189]

4. Information

Good information is the lifeblood of a deliberative process. [FN190] Citizen volunteers have a limited amount of time to devote to board activities, and they *942 have varying levels of prior knowledge of the issues. To overcome an individual's preconceptions about the problem and to develop well-informed public advice, therefore, board members need to be provided with both basic and detailed information in an unbiased and readily accessible format. [FN191]

The information presented should begin with fundamentals. At a Superfund site like Fernald, this included a working knowledge of site conditions, the available remedial options, and general concepts such as environmental risk. As the process continues, more detailed and directly relevant information is added, such as potential health and environmental effects and their likelihood of occurring; the limitations and uncertainties in risk and other data; economic, social, and political constraints; and the costs and benefits of various alternative remedial

options. The presentation typical of voluminous CERCLA records of decision or environmental impact statements [FN192] should be avoided. While such a format is common in review-and-comment processes and may work well for the technically sophisticated participants in a regulatory negotiation, it does not address the initial need to educate the public to allow meaningful participation by a broad cross-section of the community. In many cases, the information that the board needs to make solid recommendations already exists in such forms, but it must be evaluated, synthesized, and presented by the board staff or another third party for it to be credible and useful.

It is essential always to identify fully the sources of information and to enable those board members who wish to delve deeper into original documents to ask questions directly of the sponsor or other decisionmaking official. Thus, when presenting or discussing technical information, it is helpful to have present persons who are knowledgeable about the topic being discussed, especially if they are the source of the information. In the Task Force's deliberations, this practice enabled many questions to be resolved immediately, and it helped site personnel understand better the information needs of the board members. In the long run, this procedure built mutual confidence in the reliability and competence of technical personnel and the board members. A defining moment occurred when site personnel discovered that they had reported inaccurate data on levels of soil contamination. Instead of becoming a crisis of confidence, it became an opportunity to describe in detail the sources of the data, the opportunities for error in collecting and analyzing it, and the reasons for this particular error. The Task Force came away with a better understanding of the information it was using and a new respect for the candor of the persons providing it.

One of the most difficult questions for a citizens advisory board is how much information is enough and how much is too much. There is a strong temptation to provide the board members with every possible piece of information concerning the site. The sponsor may be very anxious to demonstrate its openness in this way, because it is genuinely committed to an advisory process or because its credibility is at issue. But such an approach very quickly buries the *943 board members in so much inf of it. A better model is to treat the board members as senior decisionmakers. [FN193] Even though it does not have decisionmaking authority, the board is akin to an executive decisionmaking group. The goal is not to make the members technical experts in all aspects of the problem, but to provide them with the type and level of information needed to make policy decisions. Every last piece of data and every last aspect of the site are not essential to such decisions. [FN194] Rather, the board needs reliable summary information, ready access to more detailed supporting material when desired, and thorough responses to questions. The ultimate test of "enough" is reached when each individual is satisfied that he or she has enough to reach a decision, and this will naturally vary from person to person and issue to issue. Additional information requested by one or a few members should be made available to the entire membership, but the others may quite appropriately decline to use it.

5. Fairness

Obviously, a citizens advisory board must adopt procedures that are fair to all participants-board members as well as the sponsor, the ex officio members, and the general public. Formal fairness is not a serious challenge for either the review-and-comment or negotiated rulemaking procedures. The review-and-comment forum offers broad access and treats all comments equally. [FN195] Regulatory negotiations have been successful in developing

fair procedures, at least among the actual participants. [FN196] However, citizens advisory boards, which seek to be deliberative and still involve a broad cross-section of interests, require special attention to several unique details, a number of which have already been introduced.

First, the overall organization of the board should be well understood by members and nonmembers before serious work begins, because many diverse interests are represented. Though charters and ground rules for other groups can be used as models, all members must be able to accept their own board's version of these documents as the basis for their participation. Important elements include the size of the board, expectations regarding attendance and participation, methods of voting, and the roles of site staff and outside consultants. *944

Second, an agreed-upon decisionmaking process should lead the members through a planned succession of understanding and evaluating information, so that at the point of actually making decisions all of the contentious issues have been thoroughly discussed. A great deal of work precedes the actual point of decision on a controversial topic, and the board members need to know at all times where they are in the decision process. A detailed work plan serves this function. Board members need to understand which issues cannot be coordinated with existing decisionmaking schedules, so that there is no confusion on this point, or so the regulatory decisionmaking process can be reorganized to include advisory board input. The work plan also informs the sponsor what products it will be receiving, when they should be available, and the technical support it will need to provide. Meeting agendas flow from the workplan. A board meeting should not be a free-for-all-as public hearings can be-but rather a structured session designed to advance toward the decisional objectives of the mission and work plan. The members and the nonmembers should know in advance how the meeting will be conducted, what will be discussed, and whether any decisions will be made.

Third, formal votes should be avoided on substantive issues until all alternatives are thoroughly explored. The board should be committed to working toward a consensus. This will in some cases mean unanimous enthusiasm for the position taken, and in others merely a position that all can live with. With the single exception of on-site waste disposition, the Task Force did not vote on substantive issues until there was unanimous agreement on the position. [FN197] Even then, the group was able to adopt a unanimous recommendation on the conditions for on-site disposal, and then submit majority and dissenting views on whether there should be on-site disposal. Given the lopsidedness of the positions (13-1), the group's overall position was clear, but the dissenter's points were fully developed for the consideration of the final decisionmaker. Even where unanimity cannot be reached, in other words, a citizens advisory board provides a forum for thoughtful discussion and advocacy of diverse views.

Finally, because citizens advisory boards consist of volunteers who are donating their spare time, fairness demands that every effort be made to accommodate the schedules of those with work and family obligations. The frequency and duration of meetings must be in keeping with the realistic capabilities of a volunteer board. Committees can be an effective way to expand the work of the board without holding more frequent, full-board meetings, though committee recommendations are probably not a good way to deal with the central issues on which all members should be fully knowledgeable. A regular meeting location (or locations) provides the board with a level of comfort and familiarity, which are assets in developing working relationships. These points should be discussed within the board early on and a decision reached on specific items like the attendance policy and the regular meeting times, so that individuals can plan accordingly.*945

6. Transparency

A citizens advisory board cannot be the whole of a public participation program; rather, it is one aspect of a broader program that seeks to reach out to all interested persons through a variety of methods. [FN198] Citizens advisory boards are not elected bodies. While they can and should represent a broad range of public concerns, no selective group can represent the full public. The board's legal status is, accordingly, no greater than any other individual's, so its existence must not preclude other input.

As a working group of volunteers, a citizens advisory board is not in a position to have a comprehensive public outreach program of its own, but it can nevertheless be accessible to and in contact with the broader public. Members should understand their constituencies, whether it is membership in an organization or simply others who are similarly affected or interested. Even if membership and voting in the citizens advisory board is personal rather than organizational, most members do broadly represent the interests of some sector of the general public. Members should be encouraged to recognize and understand the communities that will most likely identify with them and work to ensure that those communities are informed of and involved in board activities. Citizens advisory boards must provide for complete public access. Closed meetings can be helpful in reaching agreement and are customary in many negotiations, [FN199] but they are a source of distrust in public decisionmaking. Secrecy is a serious objection to regulatory negotiation, [FN200] and it is probably fatal to a citizens advisory board. As a result, all meetings should be well advertised and open to the public. Where applicable, the meeting place should have a clear physical connection to the source of the problem (i.e., the site or facility), [FN201] and the amount of space should be sufficient for the attendance of the general public. The participation of nonmembers should be encouraged to the extent consistent with an orderly meeting. At a minimum, public comment should be a regular and explicit part of each meeting's agenda. [FN202]

The citizens advisory board process must, in a word, be transparent. Transparency includes full explanations of decisions and full disclosure of disagreements. It also includes the previously discussed elements of a known *946 process for selection of members, for choosing issues, and for reaching decisions. And it includes an open, ongoing relationship with the general public to assure that the board does not lose sight of the concerns that led to its establishment.

D. Results

1. Formalities

The work product of a citizens advisory board should reflect the qualities that have been emphasized throughout: breadth of points of view, full information, transparency, and deliberation. This can only be accomplished with a detailed written report or series of written recommendations on the issues identified in the group's mission. The credibility of and the weight accorded to the board's recommendation are based on the quality of the process, of the information relied upon, and of the board's reasoning. Therefore, these elements must be displayed in the board's work product. It must demonstrate that the recommendations are informed, take account of all points of view, and were arrived at through discussion and deliberation. Areas of disagreement and the precise extent of the disagreement must be clearly delineated.

A relatively formal written recommendation has other values, too. It helps to ensure that

there will not be disagreements over exactly what was and was not agreed. A writing provides a good tool for bringing discussions to closure. The Task Force developed the practice of reaching a general sense of the group's views at one meeting, directing the chair to develop a written recommendation on that basis, revising the recommendation based on comments between meetings, and then finalizing the language at the next meeting. This assured that difficult issues would receive thorough consideration, but avoided lengthy drafting sessions by a committee of the whole. Clearly identifiable, deliverable products are also an excellent way to give direction and movement to a lengthy process.

2. Reasoning

A candid explanation of the reasoning behind the recommendations and the reasons for disagreement, if any, is central to the credibility of a citizens advisory board or any administrative process. This is why an agency is required to provide an explanation as the preamble to a rule or as part of an adjudication. [FN203] One of the most troubling critiques of regulatory negotiation is that the agency's explanation of the result is not a reliable indication of its actual thinking, but is simply window dressing for a compromise. [FN204] It is therefore incumbent on a *947 citizens advisory board to demonstrate that its recommendations embody a principled vision of the general good, that difficult choices were faced, and that the competing considerations were honestly balanced. In this connection, any minority views should be fully reported and the reasons for them explained to the satisfaction of those holding the minority view. If transparency is to be the hallmark of the citizens advisory board process, both harmony and disharmony must be frankly acknowledged.

It was noted above that the most difficult and controversial issue before the Task Force was whether to recommend the shipment of all waste material-millions of cubic yards of it-to a distant location, or to recommend the placement of some or all of the waste in a permanent disposal facility on part of the site. This choice implicated a myriad of considerations: the present and future use of the site, residual risk levels (which would determine the volume of waste and hence the size of the facility), treatment options, the reliability of disposal technologies, the risks of transporting waste, the costs of different alternatives, and so on. The cheapest and simplest solution, of course, was the disposal of all wastes on site; the one instinctively preferred by the residents was transportation of all of the wastes elsewhere. Ultimately, the Task Force adopted a balanced approach in which the high-hazard materials were to be shipped off site and the low-hazard materials were to remain on site in an engineered facility. This was not simply a compromise. The risks and other disamenities of a radioactive waste disposal facility on the small Fernald site were weighed against transportation risks and limitations on the willingness of other localities to accept Fernald waste, despite being climatically or geologically better suited to it. The Task Force approach takes principled advantage of a central fact about the wastes: the high-hazard material is several orders of magnitude more radioactive than the low-hazard, and there is a similar, but inverse, disparity between the volumes of the high- and low- hazard materials. Shipping only the high-hazard materials reduced risks both from future exposure to the waste and from the transportation of millions of cubic yards of material across the country. Even so, unanimity was not reached on this point, as one member was unable to agree to an on-site disposal facility. Therefore, the Task Force's report not only disclosed the fact of the dissenter's objections, but made the case for that position. Thus the minority view had equal access to the decisionmaker's attention-a key advantage of the review-and-comment models-and the reader of

the recommendations received a full analysis of the issue and could make intelligent choices among differing views- which is not necessarily possible in negotiated rulemakings.

3. Value Added

The unstated postulate of this Article is that the involvement of the general public adds value to administrative decisions, even (or especially) decisions that involve highly technical and complex questions of human health and the cost and reliability of available preventive technologies. The postulate is not intuitively *948 obvious, [FN205] but it can be defended on both instrumental [FN206] and institutional grounds. [FN207] As I have argued elsewhere, [FN208] the public can bring useful information to the table. Moreover, lay people tend to have a richer, more complex, and value- sensitive understanding of risk than the risk metrics that experts typically use. [FN209] And of course governmental decisionmakers are ultimately accountable to the public, so a participatory process is an important value in itself. [FN210] According to the recently completed report of The Presidential/Congressional Commission on Risk Assessment and Risk Management (Presidential/Congressional Commission), public participation:

1. Supports democratic decision-making.
2. Ensures that public values are considered.
3. Develops the understanding needed to make better decisions.
4. Improves the knowledge base for decision-making.
5. Can reduce the overall time and expense involved in decision-making.
6. May improve the credibility of agencies responsible for managing risks.
7. Should generate better accepted, more readily implemented risk management decisions.

[FN211]

In sum, public participation is worth the considerable effort that citizens advisory boards entail.
*949

Outside review of technical decisions by a group that is not expert in the underlying subject matter should not strike lawyers, in particular, as odd or inappropriate. It is a premise of judicial review of agency action as it has developed since about 1970. [FN212] An outsider, whether a court or a citizens advisory board, can ask basic "why" questions about assumptions and cast a critical eye on the logic of the conclusions drawn. [FN213] Judge Leventhal argued that the administrative system very much needs generalists who will go to the heart of the issue and help the agency to take a clear, objective view of its work. [FN214] *950 Judge Wald speaks of "an agency responsibility to convince an educated generalist judge that the agency's rule is the product of intelligent policymaking, not sloppy work or pure political ideology." [FN215] The quality of an agency's original consideration probably improves when it knows that it will have to explain the basis of and reasons for a decision to people who are not part of its technical circle and who may not be disposed to accept its assertions. [FN216]

The value of the outsider role is illustrated by the landmark Storm King case. [FN217] The Federal Power Commission had approved Consolidated Edison's (ConEd) plan to address the problem of supplying electric power to New York City at peak periods by building a lake in the Hudson Highlands, filled by water pumped from the river below, that would act as a "huge storage battery" of hydroelectric power for such periods. [FN218] The Second Circuit, in remanding the decision, was impressed by the fact that for every three kilowatts of electricity used to pump the water up, only two kilowatts were generated when the water was discharged. The 3:2 ratio was not necessarily irrational-supplying peak demand this inefficiently may be

inevitable or at least well worth the added expense-but it was not addressed by the utility or agency, and it revealed basic questions about the Storm King design and its alternatives that had been left behind as the storage-battery concept gathered momentum. [FN219] Ultimately, ConEd had no good explanation for choosing an environmentally destructive technique that promised so little efficiency, and the plan was scrapped.

ConEd's plan also illustrates bureaucratic tunnel vision, which is also curable with an outside perspective. In an agency like the Federal Power Commission, whose primary mission was not environmental protection, judicial review served to ensure that concentration on the primary mission did not exclude other concerns. [FN220] Justice Breyer and others have described the failure to look beyond the path that was initially chosen. [FN221] Judicial outsiders are much less likely to *951 accept such compartmentalization of issues than the people who inhabit those legal and bureaucratic structures. [FN222]

Citizens advisory boards are similarly situated to see the big picture, to look across organizational or technical boundaries, and to demand a coherent, integrated resolution. [FN223] The Task Force process provided the forum for looking at the Fernald site as a whole. For regulatory purposes, following standard CERCLA practice, [FN224] the site was divided into five "operable units" containing roughly similar problems. Useful as it may have been for administration, this arrangement discouraged systematic site-wide consideration of issues that affected two or more operable units, such as an on-site disposal facility (which affected the disposition of the waste in most operable units, future use, and residual risk levels), the final configuration of the site, and the sequencing of remedial activities to reduce carrying costs. The Task Force, on the other hand, was free to address each of these issues in a holistic way. This paved the way for the balanced approach to waste disposition in which the management of one type of waste was predicated on the management of other types. Such balancing is not possible within a single unit. Likewise, the recommendations together constituted a coherent plan for Fernald's future that could be widely understood and attract broad support.

III. Lessons for Other Paradigms

The four models of public participation examined in this Article-basic and enhanced review-and-comment, regulatory negotiation, and citizens advisory boards-have not superseded each other. They are in fact simultaneously available and amount to a menu of public participation procedures from which agency decisionmakers can choose. [FN225] The review-and-comment models are undoubtedly the most universally useful ones, as they can be adapted to informal adjudicatory or licensing decisions, as well as to general and specific rulemakings. Citizens advisory boards, in contrast, are most obviously suited to decisions that have a relatively narrow and well-understood impact, typically (though not necessarily) geographically defined. While it is entirely conceivable that a citizens advisory board type of process could be scaled up for a decision *952 of national scope-DOE and the League of Women Voters are attempting precisely this for nuclear waste storage and transportation decisions [FN226]-reliance on established groups for such decisions, as in regulatory negotiation, is attractive if only as a matter of practicality. The goal in studying public participation procedures, therefore, is not to retire older forms, but to improve all of the options available for administrative decisionmaking.

A. The Qualities of Good Public Participation

A set of procedures can be described both by its characteristics and by the qualities that it embodies. [FN227] Only the latter are normative, in the sense that they form the basis for assessing the value of the procedures and for comparing them to other models. The characteristics and qualities cannot really be separated, of course. Emphasizing, for example, the back-and-forth, dialogic nature of a citizens advisory board implicitly claims that dialogue is a good thing. Nevertheless, before turning to improvements in review-and-comment and regulatory negotiation procedures, it will help to be explicit about the qualities that public participation should exhibit to the greatest extent possible.

First-and fundamental-the process must include, or make possible the participation of, [FN228] the range of persons and groups who are affected by or are demonstrably interested in the decision at issue. The goal should be to involve not only those who regularly participate in such decisions (the usual suspects), but also those whose ability to participate meaningfully is limited. This would include both disadvantaged groups (e.g., ethnic minorities, poor people) and affected persons who are not affiliated with an organized interest group.

Second, the procedures should ensure openness on the part of the sponsor, especially if it is a governmental entity. This includes not only access to the information needed to reach the decision, but also the educational tools to make the information usable by unsophisticated participants. The proverbial playing field will never be truly level between persons with many and those with few resources, but the latter can learn enough to participate meaningfully. *953

Third, the procedures themselves must be fair. Formal fairness is relatively easy to achieve. The process must also be transparent. Participants and outsiders should clearly understand the public participation procedures themselves, the process for making the actual decision, and the role that public participation plays in the final decision.

Fourth, the procedures should result in involvement in the decision. Put another way, the participation should be influential. Participation should begin early in the decisionmaking process, when outcomes are most flexible, and it should permit actual dialogue between the decisionmaker and interested parties, and among the interested parties. The participants should strive to reach consensus, but even if that is not possible, the process should build trust among them. Ideally, public involvement procedures should enable ordinary citizens to replicate Judge Wald's "synergistic relationship" [FN229] and Judge Leventhal's "partnership in furtherance of the public interest" [FN230] between courts and agencies.

A citizens advisory board's procedure should possess a high degree of all of these qualities; [FN231] they are the goals to be achieved by structural elements described in Part II. Clearly, some of these qualities are also shared by the review-and-comment and regulatory negotiation procedures. Equally clearly, however, each is weak in others of the qualities (which was the motivation for the development of new models in the first place). We now turn to ways in which review-and-comment and regulatory negotiation could do better. To repeat, I do not advocate the wholesale replacement of review-and-comment and regulatory negotiation with citizens advisory boards. Rather, public decisionmakers and the public should have a range of models of public participation available from which they can choose.

B. Basic and Enhanced Review-and-Comment

If decide-announce-defend is the trap that review-and-comment procedures fall into, then the most important remedy is earlier public involvement in the decisionmaking process. The feasibility of such an effort is clear. Agencies often solicit preliminary views on areas of tentative

interest in advance notices of proposed rulemaking. If the agency engages the public before it has identified, however informally, a preferred approach to a given problem (or even before it has decided to address the problem), then the public has the greatest opportunity to shape the issues and to be part of the agency's thinking through a problem. The agency can then begin an informal dialogue of the kind that review-and-comment *954 rulemaking ought to facilitate. For transparency's sake, the dialogue could be either in written form (for example, written or summarized oral comments to the agency and regular agency updates mailed to commentators), or it could occur in public meetings that are transcribed or summarized in writing. There is simply no reason that such procedures should be particularly burdensome to governmental organizations that habitually communicate and memorialize discussions in memoranda and other written forms.

Another weakness of review-and-comment procedures is lack of openness. The open record of informal rulemaking means that the agency can rely on general knowledge and information that is not specifically referred to in its decision. While the requirement of a trial-type, closed record would stifle the process, the agency ought to be able to produce the information supporting its factual or inferential assertions and to disclose its need to make assumptions and judgments, [FN232] without making the public resort to the Freedom of Information Act. Some of the congressional provisions for enhanced review-and-comment in fact require the creation of an expanded docket into which all relevant material on which the agency relies is to be placed. [FN233]

Openness also requires actively facilitating the general public's participation in important decisions that affect them. Obviously, some rule of reason must apply to the amount of effort that would go into education, but basic explanation of technical concepts and issues ought to be possible. The CERCLA public participation procedures include technical assistance grants, described previously, that are designed to enhance the otherwise pretty basic review-and-comment procedure by providing local citizens groups with the technical wherewithal to become meaningfully involved in remedy selection. [FN234] One can easily imagine the use of new educational technologies to create user-friendly introductions to recurring subjects like toxicology, ecosystem management, and risk.

The review-and-comment paradigms basically envision sequential communications between decisionmaker and public: proposal, then response, then reply. Most hearings only add another forum for the public "responding" phase. Dialogue, in contrast, requires contemporaneous communications and responses. Some form of dialogue, however rudimentary, ought to be possible, either through an interactive system of several public responses and agency replies, [FN235] or through the development of ancillary fora that include serious back-and-forth *955 discussion of issues. EPA already does this to some extent with its Science Advisory Board, which played a key role in, for example, its reassessment of the risks of dioxin, but that is an elite group of science and policy advisors. [FN236] The agency could, for example, establish a series of educational public workshops, led by knowledgeable agency personnel, on a particular issue. The controversial proposed air quality standards for particulates, which would reduce the size of the particles of concern from 10 to 2.5 microns, [FN237] are a case in point. They will directly affect millions of individual urban dwellers, but the primary players in the debate are affected industries, established environmental and health groups, state governments, and members of Congress. A series of workshops could expand the involvement of individual citizens, help the nonexperts among them to understand the issues, and provide a nonadversarial forum for

discussions among agency, industry, and citizens.

Enhancements of these kinds will not change the fundamental structure of the review-and-comment models. The suggested workshops, for example, should not be expected to result in extensively negotiated or deliberated solutions. Rather, these modifications would simply improve models whose strengths- simplicity and efficient collection of input from a wide variety of sources- make them still the best choice for many decisions.

C. Regulatory Negotiation

The principal concerns with regulatory negotiation discussed in Part I were the narrow range of participants and the unreliability of the stated rationales for the outcome. It is less obvious how those problems can be repaired, but it is also more important that they be repaired, as they go to the heart of the legitimacy of the procedure for making public decisions.

The nature of a negotiation limits, as a practical matter, the number of active participants. It also, as has been discussed, requires some parity in sophistication on the technical aspects of the decision to be taken. As a result, regulatory negotiations naturally turn to existing interest groups, creating a closed system *956 that elevates the influence of a limited number of participants who are repeat players. [FN238] Significantly broader active participation in negotiating sessions may be impractical, but it may be possible to organize a two-tier process in which the parties at the table (the first tier) undertake to communicate with a broader group of affected persons (the second tier). [FN239] The second-tier process could take any number of forms-workshops, advisory boards, etc.-but at a minimum it would ensure that the negotiating process and the issues to be negotiated are fully disclosed (transparency), that relevant information is widely available, and that it is open to groups and individuals who are otherwise unable to participate in such a negotiation.

The obvious reform, that the stated rationale for the outcome of the negotiation accurately reveal its real basis, is easy to state but difficult to enforce. Perhaps the only way to ensure that the outcome and rationale match is to require that negotiating sessions be open to the public. There is debate about the utility of secrecy in regulatory negotiations, [FN240] and secrecy is certainly the norm in private negotiations. Nevertheless, secrecy should be viewed with extreme skepticism in managing public business. Candor in rationale will also feed back into the negotiating process and improve the breadth of participation. One objection to disingenuous rationales is that they foreclose nonparticipants in the negotiation from commenting meaningfully on the negotiated proposal and, if need be, from effectively challenging it in court. [FN241] An accurate explanation of the decision in terms of the public interest allows any interested person to understand the action taken and the reasons for it, and to respond to it. With a little imagination it should be possible to find ways to disclose the substance of negotiating sessions without the intrusiveness of a roomful of observers.

Again, the foregoing are suggested improvements in a process that, while flawed, has great value. Many administrative decisions, or parts of decisions, involve highly technical issues whose resolution one way or another will have little impact on the general public but a substantial effect on the ability of the regulated entity to comply. For those decisions, negotiation makes a great deal of sense. Similarly, decisions that affect a readily identified universe of persons who are well represented by a limited number of existing groups may be appropriate for negotiation. Where appropriate, therefore, improvements in the qualities of representation, transparency, and candor render negotiation a valuable option for administrative decisionmaking.

Conclusion

Strictly from the point of view of efficiency, Captain Renault's order to "round up the usual suspects" whenever an anti-Vichy crime had been committed in Casablanca was probably a perfectly reasonable way to begin his investigation. Likewise, administrative decisionmakers could do worse than rounding up the usual interest groups. But they can also do better. When Captain Renault gave the order to round up the usual suspects after Major Strasser was shot, the usual suspects did not of course include the actual culprit. The point, at the risk of belaboring the analogy, is that the usual suspects are rarely the only suspects and may not be the right suspects.

As agencies seek new, collaborative ways of doing business, whether the purpose is to avoid the rigidity of modern review-and-comment procedures or to engage the public in a decisionmaking partnership, they must beware of excluding important portions of the affected community. They must also ensure that the collaborative procedure makes meaningful participation possible, that it is transparent, and that it genuinely involves the participants in making decisions. Citizens advisory boards represent a useful new alternative to the one-way, often adversarial, communication of the review-and-comment models and to the narrow representation of regulatory negotiation. Citizens advisory boards do not meet the needs of every decision, but with careful organization and structuring they can result in better administrative decisions that enjoy widespread public support.

[FN1]. James B. Helmer, Jr. Professor of Law, University of Cincinnati College of Law. I am grateful to Wendy Wagner for helpful suggestions, to Jim O'Reilly for encouraging me to write this Article in the first place, and to David Erlewine for research assistance in the preparation of this Article. Doug Sarno's influence is ubiquitous. This Article is dedicated to the memory of my father, James Applegate.

[FN1]. Casablanca (Metro-Goldwyn-Mayer 1942). The line is spoken by Captain Louis Renault in the final scene of the movie. Renault had previously assured Strasser, in connection with another murder, that his officers had rounded up "twice the usual suspects."

[FN2]. Richard B. Stewart, *The Reformation of American Administrative Law*, 88 Harv. L. Rev. 1667 (1975).

[FN3]. See *id.* at 1671-78. Stewart describes two phases of the traditional model. The first, "transmission belt" theory, calls for the direct, even mechanical, translation of congressional policy to regulatory action through the agencies. See *id.* at 1675-77. As this vision became more and more obviously fictional, the second, "expertise" theory, was called into service to justify unelected agencies' exercise of discretionary governmental power. See *id.* at 1678.

[FN4]. See Robert Glicksman & Christopher H. Schroeder, *EPA and the Courts: Twenty Years of Law and Politics*, *Law & Contemp. Probs.*, Autumn 1991, at 249, 259-62, 276-81 (describing two versions of pluralism); Jim Rossi, *Participation Run Amok: The Costs of Mass Participation for Deliberative Agency Decisionmaking*, 92 Nw. U. L. Rev. 173, 196-203 (1997) (contrasting pluralism and "expertocracy"); Stewart, *supra* note 2, at 1682-84, 1712-13, 1760-62 (describing

the interest representation model); see also Christopher J. Bosso, Environmental Values and Democratic Institutions, in *Environmental Risk, Environmental Values, and Political Choices* 72, 88-89 (John Martin Gillroy ed., 1993). The failure to seek out and further those interests was a criticism of the traditional model. See Stewart, *supra* note 2, at 1670, 1682-87, 1713-15, 1756-60; see also Robert B. Reich, Public Administration and Public Deliberation: An Interpretive Essay, 94 *Yale L.J.* 1617, 1619-21 (1985) (describing interest group pluralism). It should be noted that Stewart was not advocating the interest representation model; he saw many flaws in it and considered it at best a transitional model. See Stewart, *supra* note 2, at 1789-90, 1802-05. In subsequent work, he has elaborated on the problems of the interest representation model. See Richard B. Stewart, Madison's Nightmare, 57 *U. Chi. L. Rev.* 335 (1990).

[FN5]. For an insightful general description of public choice theory, see Daniel A. Farber & Philip P. Frickey, *Law and Public Choice* 12-55 (1991).

[FN6]. For a general description of civic republican theory, see Frank Michelman, *Law's Republic*, 97 *Yale L.J.* 1493 (1988), Frank I. Michelman, *The Supreme Court, 1985 Term-Forward: Traces of Self-Government*, 100 *Harv. L. Rev.* 4 (1986), Reich, *supra* note 4, Mark Seidenfeld, *A Civic Republican Justification for the Bureaucratic State*, 105 *Harv. L. Rev.* 1511 (1992), Cass R. Sunstein, *Beyond the Republican Revival*, 97 *Yale L.J.* 1539 (1988), and Cass R. Sunstein, *Democratizing America Through Law*, 25 *Suffolk U. L. Rev.* 949 (1991) [hereinafter Sunstein, *Democratizing America*]. Farber and Frickey argue, contrary to conventional wisdom, that public choice and civic republicanism are deeply linked in the value that both place on legislative deliberation. See Farber & Frickey, *supra* note 5, at 55-62.

[FN7]. Thomas O. McGarity, *Some Thoughts on "Deossifying" the Rulemaking Process*, 41 *Duke L.J.* 1385, 1385-86 (1992).

[FN8]. See Farber & Frickey, *supra* note 5, at 34-35 (describing legislative rent-seeking behavior).

[FN9]. Farber and Frickey rightly caution against unrealistic claims for the feasibility of a deliberative public decisionmaking process. See *id.* at 45. Few studies exist of the appropriateness of different forms of public participation. See J. Clarence Davies & Jan Mazurek, *Regulating Pollution: Does the U.S. System Work?* 34 (1997).

[FN10]. The Federal Facilities Environmental Restoration Dialogue Committee (FFERDC) issued an interim report in February 1993, see Federal Facilities Env'tl. Restoration Dialogue Comm., *Interim Report of the Federal Facilities Environmental Restoration Dialogue Committee: Recommendations for Improving the Federal Facility Environmental Restoration Decision-Making Process and Setting Priorities in the Event of Funding Shortfalls* (1993) [hereinafter FFERDC Interim Report], and a final report in 1996, see Federal Facilities Env'tl. Restoration Dialogue Comm., *Final Report of the Federal Facilities Environmental Restoration Dialogue Committee: Consensus Principles and Recommendations for Improving Federal Facilities Cleanup* (1996) [hereinafter FFERDC Final Report]. The creation of citizens advisory boards for this purpose had been recommended by the Office of Technology Assessment. See

Office of Tech. Assessment, Congressional Bd. of the 101st Congress, OTA-O 484, Complex Cleanup 139-41 (1991).

[FN11]. I have chaired the SSAB at the DOE's Fernald site in southwestern Ohio since its creation in 1993, and the reader need hardly be cautioned that with personal experience comes bias, no matter how earnestly one seeks objectivity.

[FN12]. Lawrence E. Susskind, Overview of Developments in Public Participation, in Public Participation in Environmental Decisionmaking 2, 3 (ABA Standing Comm. on Env'tl. Law ed., 1994).

[FN13]. For a fuller description of the actual workings, see Thomas O. McGarity, Reinventing Rationality 191-262 (1991), Cary Coglianese, Litigating Within Relationships: Disputes and Disturbance in the Regulatory Process, 30 L. & Soc'y Rev. 735, 740-41, 748-53 (1996), and William F. Pedersen, Jr., Formal Records and Informal Rulemaking, 85 Yale L.J. 38, 52-58 (1975).

[FN14]. For a discussion of these practices as a form of regulatory negotiation, see Lawrence S. Bacow & Michael Wheeler, Environmental Dispute Resolution 279-322 (1984).

[FN15]. 5 U.S.C. § 553 (1994).

[FN16]. See Committee to Review Risk Management in the DOE's Env'tl. Remediation Program & Commission to Review Risk Management in the DOE's Env'tl. Remediation Program, National Research Council, Building Consensus Through Risk Assessment and Management of the Department of Energy's Environmental Remediation Program 36 (1994) [hereinafter National Research Council].

[FN17]. See 40 C.F.R. §§ 1503, 1505 (1996).

[FN18]. See 16 U.S.C. §§ 1600-1614 (1994). But see Jeff Sirmon et al., Communities of Interests and Open Decisionmaking, J. Forestry, July 1993, at 17 (describing a new consultative process).

[FN19]. See 42 U.S.C. § 9617 (1994); EPA National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. § 300.430(f)(3). A recent study of DOE's remediation decisionmaking noted the inadequacy of the traditional review-and-comment process. See National Research Council, *supra* note 16, at 7-8.

[FN20]. See Susan Rose-Ackerman, American Administrative Law Under Siege: Is Germany a Model?, 107 Harv. L. Rev. 1279, 1292 (1994) (observing that the amount of public participation even in a European democracy like Germany is far less than in the United States).

[FN21]. See also Coglianese, *supra* note 13, at 749-51 (noting that the prenotice period may well involve informal discussions, though limited to insiders). See generally Susan Rose-Ackerman,

Controlling Environmental Policy 14-15 (1995) (discussing APA's informal rulemaking process in which the public has a reasonable opportunity to participate). The recent "ossification" literature, however, contends that the highly adaptable process intended by the framers of the APA for informal rulemaking no longer operates that way. See Carnegie Comm'n on Science, Tech., & Gov't, *Risk and the Environment* 107-09 (1993) [hereinafter Carnegie Comm'n]; McGarity, *supra* note 7, at 1385. For a current overview of the ossification literature, see Mark Seidenfeld, *Demystifying Deossification: Rethinking Recent Proposals to Modify Judicial Review of Notice and Comment Rulemaking*, 75 *Tex. L. Rev.* 483, 483-90 (1997).

[FN22]. The phrase has become a descriptive cliché for describing a public participation process that is not intended to take the public's views into account. See Michael B. Gerrard, *Whose Backyard, Whose Risk* 132 (1994); National Research Council, *Understanding Risk: Informing Decisions in a Democratic Society* 78 (1996).

[FN23]. See Bernd Holznagel, *Negotiation and Mediation: The Newest Approach to Hazardous Waste Facility Siting*, 13 *B.C. Envtl. Aff. L. Rev.* 329, 346 (1986) (reporting criticisms of the adjudicatory and legislative⁹⁵⁸ hearings as being pro forma and often too late in the process to allow effective citizen input).

[FN24]. *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 435 U.S. 519, 543-48 (1978) (reviewing adequacy of the administrative procedural review); see also *Baltimore Gas & Elec. Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87, 97-107 (1983) (reviewing adequacy of the administrative substantive review).

[FN25]. See Cornelius M. Kerwin, *Rulemaking* 200 (1994); E. Donald Elliot, *Re-Inventing Rulemaking*, 41 *Duke L.J.* 1490, 1495 (1992); Stewart, *supra* note 2, at 1775-76.

[FN26]. For these purposes, I am not considering the procedures of formal rulemaking and adjudication under the APA. See 5 U.S.C. §§ 554, 556- 557 (1994). Trial-like procedures do not lend themselves to broad public participation, nor are they intended to. Among other things, they effectively require the retention of lawyers to represent the parties adequately, and participation by persons other than the parties typically requires special permission. See Stewart, *supra* note 2, at 1756-60. On the other hand, enhanced review-and-comment is not limited to so-called "hybrid rulemaking," as the additional procedures discussed herein can be applied to informal adjudication.

[FN27]. See Stephen G. Breyer & Richard B. Stewart, *Administrative Law and Regulatory Policy* 572-74 (3d ed. 1992).

[FN28]. *Vermont Yankee*, 435 U.S. at 643.

[FN29]. *Natural Resources Defense Council, Inc. v. United States Nuclear Regulatory Comm'n*, 547 F.2d 633, 653 (D.C. Cir. 1976) (emphasis added), *rev'd sub nom. Vermont Yankee*, 435 U.S. 519.

[FN30]. See *id.* at 654 n.58.

[FN31]. See *Vermont Yankee*, 435 U.S. at 543-48. Agencies, however, remain free to adopt additional procedures voluntarily. See *id.* at 544. The harshness of the Supreme Court's tone in *Vermont Yankee* is usually attributed to an effort to stem what it saw as a rising tide of "hybrid rulemaking," that is, judicial direction to agencies to adopt procedures drawn from formal proceedings in informal rulemaking. The rise of informal rulemaking left those who were adversely affected by agency decisions with fewer opportunities to persuade the agency otherwise. In several such cases, the courts of appeals had stepped in to encourage or require agencies to adopt additional procedures to assure full consideration of the difficult and complex issues before them. The other case under review in *Vermont Yankee*, *Aeschliman v. United States Nuclear Regulatory Commission*, 547 F.2d 622 (D.C. Cir. 1976), was the Court's particular target but the trend was much broader. See, e.g., *Natural Resources Defense Council*, 547 F.2d at 643 n.23; *International Harvester Co. v. Ruckelshaus*, 478 F.2d 615 (D.C. Cir. 1973); *Scenic Hudson Preservation Conference v. Federal Power Comm'n*, 354 F.2d 608 (2d Cir. 1965). Colin Diver has interpreted the Supreme Court's decision as an effort to secure technical rationality in agency decisions. See Colin S. Diver, *Policymaking Paradigms in Administrative Law*, 95 Harv. L. Rev. 393, 422-25 (1981).

[FN32]. 42 U.S.C. § 7607(d) (1994); see also 15 U.S.C. §§ 2603(b)(5), 2618 (1994) (providing for rulemaking procedures and judicial review under the Toxic Substances Control Act (TSCA)).

[FN33]. See Daniel J. Fiorino, *Making Environmental Policy* 96 (1995); Daniel J. Fiorino, *Citizen Participation and Environmental Risks: A Survey of Institutional Mechanisms*, 2 Sci. Tech. & Hum. Values 226, 237 (1990); Holznagel, *supra* note 23, at 346.

[FN34]. See Seidenfeld, *supra* note 21, at 575 & n.168; see also John S. Applegate, *A Beginning and Not an End in Itself: The Role of Risk Assessment in Environmental Decision-Making*, 63 U. Cin. L. Rev. 1643, 1651, 1672-74 (1995) (criticizing regulatory reform legislation that would encourage judicial challenges to agency action).

[FN35]. For an example of the effect on TSCA rulemaking, see *Corrosion Proof Fittings v. EPA*, 947 F.2d 1201, 1211-13 (5th Cir. 1991), discussed in Thomas O. McGarity, *The Courts and Ossification of Rulemaking: A Response to Professor Seidenfeld*, 75 Tex. L. Rev. 525, 540-49 (1997).

[FN36]. There are, in fact, several causes of ossification, including legislatively mandated procedures, Office of Management and Budget oversight, and rigorous judicial review. See McGarity, *supra* note 35, at 528; Richard J. Pierce, Jr., *Seven Ways to Deossify Agency Rulemaking*, 47 Admin. L. Rev. 59, 86-93 (1995); Seidenfeld, *supra* note 21, at 484-86; Patricia M. Wald, *Regulation at Risk: Are Courts Part of the Solution or Most of the Problem?*, 67 S. Cal. L. Rev. 621, 625-33 (1994) (noting a limited judicial role and a major executive role in ossification). For present purposes, the particular causes are less important than the overall effect, which is to create an incentive to avoid review-and-comment procedures.

[FN37]. 42 U.S.C. §§ 9601-9675.

[FN38]. See generally Ellison Folk, Public Participation in the Superfund Cleanup Process, 18 Ecology L.Q. 173, 177 (1991) (analyzing EPA's Community Relations Program from the perspective of communities affected by Superfund sites).

[FN39]. See Office of Tech. Assessment, Superfund Strategy 257 (1985); Folk, *supra* note 38, at 173. A strong preclusion of judicial review was likewise intended to foreclose another opportunity for members of the public to ensure that their views are considered. See 42 U.S.C. § 9613(h). Section 9613 also precludes challenges by potentially responsible parties; it is not aimed solely at public commentators. See *Clinton County Comm'rs v. EPA*, 116 F.3d 1018 (3d Cir. 1997) (en banc) (holding that the preclusion of judicial review of ongoing clean-up operations is absolute), cert. denied, 118 S. Ct. 687 (1998).

[FN40]. See Office of Tech. Assessment, *supra* note 39, at 237. Reliance upon agency expertise has intuitive appeal, and thus, has been a principal ingredient in most administrative paradigms since the New Deal. Cf. Hugh H. Bownes, Should Trial by Jury Be Eliminated in Complex Cases?, 1 Risk 75 (1990) (questioning whether a jury trial is appropriate for highly sophisticated litigation).

[FN41]. Even before subsequent amendments elevated public participation to a statutory requirement, EPA voluntarily included community organizations in the clean-up process. See Office of Emergency and Remedial Response, U.S. Env'tl. Protection Agency, EPA/540/R-92/009, Community Relations in Superfund (1992) (discussing the interim drafts of the "handbook" issued in 1983 and 1988); see also Folk, *supra* note 38, at 184 (discussing industry impact on clean-up decisions of EPA) (citing Steven A. Cohen et al., Institutional Learning in a Bureaucracy: The Superfund Community Relations Program, in *Management of Uncontrolled Hazardous Waste Sites* 405, 406 (National Conference on Management of Uncontrolled Hazardous Waste Sites ed., 1981)).

[FN42]. See 42 U.S.C. § 9617(a)-(d). The proposed plan is the final document prior to the issuance of the record of decision. After a comprehensive inquiry into the available alternatives, the regulators describe their choice of remedial action for the site. This procedure applies to federal facilities. See *id.* § 9620(f).

[FN43]. See *id.* § 9617(a).

[FN44]. See *id.* § 9617(b)-(c).

[FN45]. See 40 C.F.R. § 300.430(c) (1996) (requiring site-specific determinations of "appropriate" outreach activities). For an overview of these provisions, see Casey Scott Padgett, Selecting Remedies at Superfund Sites: How Should "Clean" Be Determined?, 18 Vt. L. Rev. 361 (1994).

[FN46]. See 42 U.S.C. § 9617(e)(1). See generally General Accounting Office, GAO/RCED -

94-256, Superfund: Status, Cost, and Timeliness of Hazardous Waste Site Cleanups 4 (1994) (providing breakdown of assistance-grant fund recipients). Citizens suits were authorized, too, see 42 U.S.C. § 9659(a), but they are limited to violation of duties established by EPA in the record of decision (that is, the document that reflects the final remedy selection), are preemptable by EPA action, and are limited to the time after the remedial action has been completed. See Andrea L. Bull, Superfund and the Hazardous Waste Site Next Door: Can Citizens Clean It Up?, 6 Pace Envtl. L. Rev. 643, 658 (1989); Jeffrey M. Gaba & Mary E. Kelly, The Citizen Suit Provision of CERCLA: A Sheep in Wolf's Clothing?, 43 Sw. L.J. 929, 930 (1990). Gaba and Kelly state that "the absence of a citizen suit provision specifically authorizing public challenges to actions under CERCLA was a major gap in the central role of citizens under U.S. environmental policy." *Id.* In the Superfund Amendments and Reauthorization Act of 1986 (SARA), Pub. L. No. 99-499, § 206, 100 Stat. 1613, Congress responded by adding § 310 to CERCLA. This was codified as amended at 42 U.S.C. § 9659.

[FN47]. See John A. Hird, Superfund 219 (1994); Bull, *supra* note 46, at 643.

[FN48]. See 40 C.F.R. § 300.430(f); see also 42 U.S.C. § 9621.

[FN49]. See Padgett, *supra* note 45, at 404-05.

[FN50]. See Coglianese, *supra* note 13, at 749-51.

[FN51]. See Padgett, *supra* note 45, at 384 n.72. 959

[FN52]. See *id.* at 405.

[FN53]. See Jody Freeman, Collaborative Governance in the Administrative State, 45 UCLA L. Rev. 1, 15-16 (1997); John D. Graham & March Sadowitz, Superfund Reform: Reducing Risk Through Community Choice, *Issues Sci. & Tech.*, Summer 1994, at 35, 36.

[FN54]. See Hird, *supra* note 47, at 219.

[FN55]. See General Accounting Office, GAO/RCED-94-156, Superfund: EPA's Community Relations Efforts Could Be More Effective 6 (1994).

[FN56]. See *id.* at 36.

[FN57]. See *id.* at 8-10; see also Hird, *supra* note 47, at 87 (emphasizing the need to create institutions that will enable the public to use the information that is provided).

[FN58]. Deeohn Ferris, Communities of Color and Hazardous Waste Cleanup: Expanding Public Participation in the Federal Superfund Program, 21 Fordham Urb. L.J. 671, 675 (1994) (emphasis in original).

[FN59]. Hird, *supra* note 47, at 219 (quoting a close observer of the outreach program).

[FN60]. See *The Third Wave Man*, *Envtl. F.*, Sept./Oct. 1996, at 36, 37 (profiling Mark Van Putten).

[FN61]. The Carnegie Commission expressly advocated regulatory negotiation as a response to the ossification it perceived in rulemaking. See Carnegie Comm'n, *supra* note 21, at 111. Ossification also spurred developments in the opposite direction, namely reliance on strict judicial scrutiny of agency policy statements that of course requires no public participation. See Robert A. Anthony & David A. Codevilla, *Pro-Ossification: A Harder Look at Agency Policy Statements*, 31 *Wake Forest L. Rev.* 667, 669 (1996).

[FN62]. There is substantial literature on negotiated rulemaking. The interested reader might begin with the Negotiated Rulemaking Act of 1990, 5 U.S.C. §§ 561-570 (1994 & Supp. II 1996), Freeman, *supra* note 53, Philip J. Harter, *Negotiating Regulations: A Cure for Malaise*, 71 *Geo. L.J.* 1 (1982), Henry E. Perritt, Jr., *Negotiated Rulemaking Before Federal Agencies: Evaluation of the Recommendations by the Administrative Conference of the United States*, 74 *Geo. L.J.* 1625 (1986), Lawrence Susskind & Gerard McMahon, *The Theory and Practice of Negotiated Rulemaking*, 3 *Yale J. on Reg.* 133 (1985), and an excellent, just-published issue on regulatory negotiation, *Twenty-Eighth Annual Administrative Law Issue*, 46 *Duke L.J.* 1255 (1997). For more skeptical views, see Cary Coglianese, *Assessing Consensus: The Promise and Performance of Negotiated Rulemaking*, 46 *Duke L.J.* 1255 (1997), William Funk, *When Smoke Gets in Your Eyes: Regulatory Negotiation and the Public Interest-EPA's Woodstove Standards*, 18 *Envtl. L.* 55 (1987), Susan Rose-Ackerman, *Consensus Versus Incentives: A Skeptical Look at Regulatory Negotiation*, 43 *Duke L.J.* 1206 (1994), and Patricia M. Wald, *Negotiation of Environmental Disputes: A New Role for the Courts?*, 10 *Colum. J. Env'tl. L.* 1 (1985). A very useful dialogue on regulatory negotiation as a form of citizen participation may be found in Daniel Fiorino, *Regulatory Negotiation as a Form of Public Participation*, in *Fairness and Competence in Citizen Participation* 223 (Ortwin Renn et al. eds., 1995), and Susan G. Hadden, *Regulatory Negotiation as Citizen Participation: A Critique*, in *Fairness and Competence in Citizen Participation*, *supra*, at 239.

[FN63]. See Exec. Order No. 12,866, § 6(a)(1), 3 C.F.R. 638, 644- 45 (1994), reprinted in 5 U.S.C. § 601 (1994); Memorandum on Agency Rulemaking Procedures, 1993 Pub. Papers 1635 (Sept. 30, 1993). For an important discussion of the relationship between regulatory negotiation and the requirements of the Federal Advisory Committee Act, see Steven P. Croley & William F. Funk, *The Federal Advisory Committee Act and Good Government*, 14 *Yale J. on Reg.* 451, 454 (1997).

[FN64]. See Negotiated Rulemaking Act of 1990, 5 U.S.C. §§ 561-570; see also Alternative Dispute Resolution Act, *id.* §§ 571-583 (allowing use of alternate methods of dispute resolution on issues relating to agency programs).

[FN65]. See Recommendation 85-5: Procedures for Negotiating Proposed Regulations, 1985 Admin. Conf. of the U.S. Recommendations & Rep. 23; Recommendation 82-4: Procedures for Negotiating Proposed Regulations, 1982 Admin. Conf. of the U.S. Recommendations & Rep. vol. 1, at 21.

[FN66]. See William H. Freedman & Karen A. Caffee, EPA's Project XL: Regulatory Flexibility, *Nat. Resources & Env't*, Spring 1996, at 59, 60; Freeman, *supra* note 53, at 55-66, 77; Beth S. Ginsberg & Cynthia Cummis, EPA's Project XL: A Paradigm for Promising Regulatory Reform, 26 *Envtl. L. Rep. (Envtl. L. Inst.)* 10,059, 10,061 (Feb. 1996); Rena I. Steinzor, Regulatory Reinvention and Project XL: Does the Emperor Have Any Clothes?, 26 *Envtl. L. Rep. (Envtl. L. Inst.)* 10,527, 10,532 (Oct. 1996). Collaborative decisionmaking as a general category, of which regulatory negotiation is one example, is thoroughly reviewed in Freeman, *supra* note 53.

[FN67]. See, e.g., Lawrence Susskind & Jeffrey Cruikshank, *Breaking the Impasse* 229 (1987); Holznagel, *supra* note 23; Bradford C. Mank, The Two-Headed Dragon of Siting and Cleaning Up Hazardous Waste Dumps: Can Economic Incentives or Mediation Slay the Monster?, 19 *B.C. Env'tl. Aff. L. Rev.* 239 (1991). Such negotiations can be facilitated by the use of a trained mediator. See Jenifer Heath, *Mediation of Environmental Disputes: Who, What, Where, When, Why, and How*, 28 *Env't Rep. (BNA)* 1306 (Oct. 31, 1997).

[FN68]. See McGarity, *supra* note 7, at 1438-40; see also Freeman, *supra* note 53, at 9-10 (arguing that recent developments in the rulemaking process have made the ossification problems noted by McGarity even worse). Cary Coglianese challenges the efficiency claims on empirical grounds-arguing that experience has not borne out the expectations of speed and reduction in litigation-though efficiency remains at least a potential benefit of negotiated rulemaking. See Coglianese, *supra* note 62, at 1278-309.

[FN69]. See Philip J. Harter, *Regulatory Negotiations: An Overview*, 17 *Envtl. L. Rep. (Envtl. L. Inst.)* 10,245, 10,246 (July 1987); Susskind & McMahon, *supra* note 62, at 137; Derek Raymond McDonald, Note, *Judicial Review of Negotiated Rulemaking*, 12 *Rev. Litig.* 467, 468 (1993); see also Fiorino, *supra* note 62, at 225 (defining "affected interest" as someone likely to challenge a rule in court).

[FN70]. See Harter, *supra* note 62, at 30. Harter explains that negotiation can be a much cheaper form of decisionmaking than litigation because it "reduces the need to engage in defensive research in anticipation of arguments made by adversaries." *Id.* at 28.

[FN71]. See *id.* at 29; Owen Olpin et al., *Applying Alternative Dispute Resolution to Rulemaking*, 1 *Admin. L.J.* 575, 578 (1987).

[FN72]. See Ellen Siegler, *Regulating Negotiations: A Practice Perspective*, 22 *Envtl. L. Rep. (Envtl. L. Inst.)* 10,647, 10,651 (Oct. 1992).

[FN73]. See Harter, *supra* note 62, at 30-31. But see Hadden, *supra* note 62, at 242-44 (expressing concern that the agency may define and limit the issues to be discussed and the parties to be invited to participate).

[FN74]. See Fiorino, *supra* note 33, at 234; see also Perritt, *supra* note 62, at 1631 (noting the movement of the arena of compromise from political/legislative to technical/agency).

[FN75]. See Freeman, *supra* note 53, at 33-35; Siegler, *supra* note 72, at 10,650-51.

[FN76]. See David Faure, *The Federal Advisory Committee Act: Balanced Representation and Open Meetings in Conflict with Dispute Resolution*, 11 *Ohio St. J. on Disp. Resol.* 489, 500 (1996). Greater political support may be particularly important now that Congress has a greater opportunity to veto regulations. See 5 U.S.C. §§ 801-808 (Supp. II 1996).

[FN77]. See Olpin et al., *supra* note 71, at 578.

[FN78]. See Rose-Ackerman, *supra* note 62, at 1218. Regulatory negotiation is premised, she argues, on the idea that the government is looking for a solution that everyone at the table can just agree on, not for the "ideal answer." *Id.*

[FN79]. See Fiorino, *supra* note 62, at 225; Harter, *supra* note 62, at 28. Harter argues that such participation by the parties in negotiation is also far superior to what is available in adversarial proceedings because parties in negotiations can make substantive decisions instead of being limited to the roles of "experts" in adversarial proceedings. See *id.*

[FN80]. See Fiorino, *supra* note 33, at 228; Siegler, *supra* note 72, at 10,651.

[FN81]. See Siegler, *supra* note 72, at 10,647; see also Coglianese, *supra* note 62, at 1271-72 (reviewing experience with negotiated rulemaking).

[FN82]. See Negotiated Rulemaking Act of 1990, 5 U.S.C. § 565 (1994); Freeman, *supra* note 53, at 77-81; Perritt, *supra* note 62, at 1644.

[FN83]. See Stuart Hill, *Democratic Values and Technological Choices* 91 (1992); Harter, *supra* note 62, at 111-12.960

[FN84]. See Harter, *supra* note 69, at 10,246. Harter argues that there should be at most between 15 and 25 parties participating in the negotiations. See *id.* While Larry Susskind, Harter states, will argue for twice that number, Harter concludes that both would "probably agree" that there should be fewer than 100. *Id.*

[FN85]. Fiorino, *supra* note 62, at 231. Access to the process is very selective and largely based on the representation of organized interests. See *id.* Though regulatory negotiation is, in theory, open to every affected and interested party, in practice only representatives of organized interests have been allowed in. See *id.*; see also Hadden, *supra* note 62, at 242 (defining "representable interests" to mean "already-organized groups").

[FN86]. See Perritt, *supra* note 62, at 1638. For example, the members of EPA's residential wood stove negotiating committee expressly agreed that each negotiator "'is authorized to commit [his or her] organization to the terms of the agreement.'" Peter Strauss et al., *Gelhorn and Byse's Administrative Law* 411 (9th ed. 1995) (alteration added) (quoting from the agreement used in EPA wood stove emissions negotiation).

[FN87]. See Rose-Ackerman, *supra* note 62, at 1210; David Schoenbrod, *Limits and Dangers of Environmental Mediation: A Review Essay*, 58 N.Y.U. L. Rev. 1453, 1466, 1470 (1983) (book review); see also Carole C. Berry, *Sub S One Class of Stock Requirement: Rulemaking Gone Wrong*, 44 Cath. U. L. Rev. 11, 25 (1994) (arguing that contrary to the delegation doctrine's axiom that policy decisions should be made only by accountable officials, negotiated rulemaking arguably takes this power and gives it to unaccountable people); Hadden, *supra* note 62, at 248; Rose-Ackerman, *supra* note 20, at 1283 (noting the difficulty in assuring that all affected parties are represented in a negotiation).

[FN88]. See generally Fiorino, *supra* note 33, at 231-34 (arguing that some forms of public participation tend to be dominated by interest groups and noting other shortcomings in forms less prone to this domination).

[FN89]. See *id.* at 228. Fiorino argues that effective amateur participation in risk decisions leads to better results and makes such decisions more "legitimate." *Id.* He concludes that arguments for such participation should start with the normative argument that a "purely technocratic orientation is incompatible with democratic ideals." *Id.* at 239.

[FN90]. See Hadden, *supra* note 62, at 247-48; see also Freeman, *supra* note 53, at 77-81 (discussing the relative positions of small businesses and local environmental groups).

[FN91]. Fiorino, *supra* note 33, at 209.

[FN92]. See Stewart, *supra* note 4, at 341-45; Sunstein, *Democratizing America*, *supra* note 6, at 957-59.

[FN93]. See Fiorino, *supra* note 33, at 234; Hadden, *supra* note 62, at 244- 45.

[FN94]. See Fiorino, *supra* note 62, at 231-32 (arguing that "the inequities in resources, time, and influence that the parties bring to the . . . table" directly affect their effectiveness as negotiators); Hadden, *supra* note 62, at 247-50. But see Siegler, *supra* note 72, at 10,652 (acknowledging that resource "demands may be particularly acute" for organizations with small staffs and budgets, but arguing that procedural mechanism of regulatory negotiations may facilitate a shift in the balance of power from industry to environmental groups).

[FN95]. Fiorino argues that simply getting "a seat at the table" empowers a party in many ways, providing substantial opportunities for influencing the outcome. Fiorino, *supra* note 62, at 231. Hadden argues that since each negotiating team is able to set its own rules, each participant has the chance to greatly affect the important aspects of discourse and procedure within the parameters of the chosen issue. See Hadden, *supra* note 62, at 244.

[FN96]. See Fiorino, *supra* note 33, at 234 (arguing that negotiation has no place for "amateurs" to directly participate in risk decisions because negotiation "draws on representatives of organized interests"); see also *The Third Wave Man*, *supra* note 60, at 36 (arguing that the provision of technical expertise to local groups is an important role for a national environmental

organization).

[FN97]. See Fiorino, *supra* note 62, at 231-34; Mank, *supra* note 67, at 280; see also Rose-Ackerman, *supra* note 62, at 1210 (arguing that all participation groups must be "well organized and similar in knowledge and bargaining skill").

[FN98]. See Rose-Ackerman, *supra* note 62, at 1211.

[FN99]. See Fiorino, *supra* note 33, at 234. On this basis, some commentators have questioned whether negotiation in fact saves time and money. See Edward Brunet, *The Costs of Environmental Alternate Dispute Resolution*, 18 *Env'tl. L. Rep. (Env'tl. L. Inst.)* 10,515, 10,516 (Dec. 1988).

[FN100]. Wendy E. Wagner, *The Science Charade in Toxic Risk Regulation*, 95 *Colum. L. Rev.* 1613, 1692 (1995).

[FN101]. See Richard B. Belzer, *Is Reducing Risk the Real Objective of Risk Management?*, in *Worst Things First?* 167, 173 (Adam M. Finkel & Dominic Golding eds., 1994); see also Funk, *supra* note 62, at 61-62 (noting the various interests involved in negotiations concerning wood stove standards and the motivations of these groups).

[FN102]. See Hadden, *supra* note 62, at 246.

[FN103]. See William Funk, *Bargaining Toward the New Millennium: Regulatory Negotiation and the Subversion of the Public Interest*, 46 *Duke L.J.* 1351 (1997); Funk, *supra* note 62, at 84. But see Freeman, *supra* note 53, at 21- 33 (expounding a theory of collaborative governance).

[FN104]. But see Rose-Ackerman, *supra* note 62, at 1219 (arguing that regulatory negotiations are unsuitable when value conflicts are central); Schoenbrod, *supra* note 87, at 1464 (arguing that for many reasons environmental issues may not permit compromise). Even strong supporters agree that values cannot be negotiated. See, e.g., Fiorino, *supra* note 62, at 235. Wendy Wagner observes that scientific "facts" are negotiated in this setting, which is a different but equally serious flaw in the process. See Wagner, *supra* note 100, at 1690-92. It not only raises the question of the appropriate subjects of negotiation, but also calls into question the candor of the resulting explanation of the decision.

[FN105]. See Belzer, *supra* note 101, at 173; Funk, *supra* note 62, at 89.

[FN106]. See Schoenbrod, *supra* note 87, at 1469. At worst, the mediation process may "undermine" regulatory processes designed to protect the public interest. *Id.* In addition, regardless of whether the pressure is on industries or environmentalists at the negotiating table, it may dilute legal rights under applicable statutes without an accountable legislature or administrative agency having to take responsibility for the dilution of such rights. See *id.* at 1469- 70; see also Brunet, *supra* note 99, at 10,516 (arguing that there are benefits to be had from the litigation of environmental issues); Mank, *supra* note 67, at 278 (arguing that many parties

agree to negotiated procedures to avoid having decisions made using procedures in which they have no voice). Fiorino, *supra* note 62, at 223-34, acknowledges but rejects this criticism.

[FN107]. See Funk, *supra* note 62, at 79-81. The unreliability also makes it very difficult for outsiders to challenge the assumptions and policies that went into the agency's conclusions. See *id.* at 79-89; Wagner, *supra* note 100, at 1691-92.

[FN108]. See Funk, *supra* note 62, at 81.

[FN109]. See *id.* at 80.

[FN110]. See *USA Group Loan Servs., Inc. v. Riley*, 82 F.3d 708, 711 (7th Cir. 1991). In the event, the Department of Education rejected the "consensus" recommendation of the loan servicers and promulgated strict regulations, which led to the judicial challenge.

[FN111]. *Id.* at 714.

[FN112]. *Id.*

[FN113]. Hird, *supra* note 47, at 219.

[FN114]. The Grand Canyon haze working group is an example of a regional focus. See Siegler, *supra* note 72.

[FN115]. See, e.g., FFERDC Final Report, *supra* note 10, app. B at B3; Elizabeth Peelle, Oak Ridge Nat'l Lab., *Beyond the NIMBY Impasse II: Public Participation in an Age of Distrust 3* (Sept. 11-15, 1988) [hereinafter Peelle, *Beyond the NIMBY Impasse II*] (paper presented at Spectrum '88, International Meeting on Nuclear and Hazardous Waste Management). See generally Frances M. Lynn & George J. Busenberg, *Citizens Advisory Committees and Environmental Policy: What We Know, What's Left to Discover*, 15 *Risk Analysis* 147, 148 (1995); Elizabeth Peelle, Oak Ridge Nat'l Lab., *Citizens Advisory Groups: Improving Their Effectiveness* (Aug. 28, 1990) [hereinafter Peelle, *Citizens Advisory Groups*] (paper presented at the 12th Annual Department of Energy Low Level Waste Management Conference, Chicago, Ill.). The relationship between the number of participants and their ability to work deliberatively is thoroughly explored in Rossi, 961 *supra* note 4, at 211-47. Rossi also provides a helpful discussion of the deliberative tradition in agency proceedings. See *id.* at 203-11.

[FN116]. See Robert E. Howell et al., *Designing a Citizen Involvement Program 1-2* (1987). This helps to account for success with the Local Emergency Planning Committees established by SARA, see Susan G. Hadden, *Public Perceptions of Hazardous Waste*, 11 *Risk Analysis* 47, 54 (1991), and the Massachusetts Local Assessment Committees for hazardous waste siting. See also Holznagel, *supra* note 23, at 362 (discussing local assessment committee membership). Comprehensive coverage is obviously easier to accomplish with local issues, simply because local issues are more clearly limited and hence the relevant participants are easier to identify.

[FN117]. See Reich, *supra* note 4, at 1640 (noting that "[d]eliberation is most appropriate to administrative decisions that are especially bound up with special values").

[FN118]. See sources cited *supra* note 104.

[FN119]. For example, EPA's Science Advisory Board is a standing organization, whereas the FDA convenes one-time expert panels to evaluate new drugs. See generally Croley & Funk, *supra* note 63 (describing the history and current regulation of federal advisory committees).

[FN120]. See generally Sheldon Krinsky, *Beyond Technocracy: New Routes for Citizen Involvement in Social Risk Assessment*, in *Citizen Participation in Science Policy* 43, 46-47 (James C. Petersen ed., 1984) (noting that advisory panels should not be viewed as an alternative to public hearings with broader public involvement).

[FN121]. Even as a mere information conduit, an advisory board represents an advance over review-and-comment since it provides continuous information over time, allowing the public to assimilate it. See generally Holznagel, *supra* note 23, at 361-64 (discussing citizen participation under Massachusetts's Hazardous Waste Facility Siting Act).

[FN122]. See General Accounting Office, GAO/T-RCED-93-1, *EPA's Superfund TAG Program: Grants Benefit Citizens but Administrative Barriers Remain* 1-14 (1992); General Accounting Office, *supra* note 55; Ferris, *supra* note 58, at 678-82. A more recent EPA survey of TAG recipients reports a higher level of satisfaction. See *Customer Satisfaction Survey: Technical Assistance Grant Program* (Environmental Protection Agency, Washington, D.C.), Dec. 1997, at 1-2.

[FN123]. See generally Howell et al., *supra* note 116, at 22 (arguing that "[c]itizens should be treated as highly valued consultants regarding the proposed action"); Fiorino, *supra* note 33, at 235 (noting that the premise of a citizens panel is to provide information so citizens can evaluate technical policy issues); Ortwin Renn et al., *Public Participation in Hazard Management: The Use of Citizen Panels in the U.S.*, 2 *Risk* 197, 208-11 (1991) (noting and charting the decisionmaking process of citizens panels).

[FN124]. See generally Daniel J. Fiorino, *Environmental Risk and Democratic Process: A Critical Review*, 14 *Colum. J. Envtl. L.* 501, 536-39 (1989) (examining steps for obtaining a participatory ideal); Howard Kunreuther et al., *Risk Perception and Trust: Challenges for Facility Siting*, 7 *Risk* 109, 111 (1996); Frederick A. Rossini & Alan L. Porter, *Public Participation and Professionalism in Impact Assessment*, in *Citizen Participation in Science Policy*, *supra* note 120, at 62, 69 (arguing that goal should be "to identify viable compounds of professionalism and participation in impact assessment").

[FN125]. For the importance of a forum for ongoing communication, questions and answers, and detailed consideration of issues, see Keystone Ctr., *Components of Successful Voluntary Action Programs* app. B at 19-21 (1992), National Research Council, *supra* note 16, at 35-37, Fiorino, *supra* note 33, at 235, and Renn et al., *supra* note 123, at 223-26.

[FN126]. For a general description of benefits and purposes of broadly based deliberations, see National Research Council, *supra* note 22, at 78-82.

[FN127]. See Susskind, *supra* note 12, at 2. See generally Fiorino, *supra* note 124, at 537-39; Lynn & Busenberg, *supra* note 115, at 148; Peter Margulies, Building Communities of Virtue: Political Theory, Land Use Policy, and the "Not in My Backyard" Syndrome, 43 *Syracuse L. Rev.* 945, 948, 964 (1992).

[FN128]. See Jane J. Mansbridge, *Beyond Adversary Democracy* 28 (University of Chicago Press 1983) (1980); Benjamin Davy, Fairness as Compassion, 7 *Risk* 99, 102-03 (1996); Kunreuther et al., *supra* note 124, at 117; Peelle, *Beyond the NIMBY Impasse II*, *supra* note 115, at 6. As O'Hare and Sanderson say, they need to get beyond "the pessimistic expectations that citizens, industry, and government all hold for each other and themselves." Gerrard, *supra* note 22, at 130 (quoting Michael O'Hare & Debra Sanderson, Facility Siting and Compensation: Lessons from the Massachusetts Experience, 12 *J. Pol'y Analysis & Mgmt.* 364, 375 (1993)); see also Hadden, *supra* note 116, at 52, 55- 56 (finding that public perceptions of risk were ameliorated by having some degree of control over risk-creating activities and trust in their personnel, and that citizens advisory boards provided both); Richard H. Pildes & Cass R. Sunstein, Reinventing the Regulatory State, 62 *U. Chi. L. Rev.* 1, 40-43 (1993) (describing importance of public trust to risk regulation).

[FN129]. See Fiorino, *supra* note 33, at 235 (pointing out that the establishment of such a board is risky for an agency in creating expectations for its acquiescence in public judgment that it may not, and perhaps should not, be prepared to meet); Renn et al., *supra* note 123, at 223-24; see also Donald P. Scrimgeour & Lisa Hanson, Colorado Ctr. for Env'tl. Management, *Advisory Groups in the U.S. Department of Energy Environmental Cleanup Process* 15-18 (1993) (providing various perspectives for successful advisory committees).

[FN130]. See Howell et al., *supra* note 116, at 21; Kunreuther et al., *supra* note 124, at 117; see also Hadden, *supra* note 116, at 52 (noting that citizens advisory groups are most effective when decisions have not been made); Holznagel, *supra* note 23, at 347 (criticizing most hearing processes as coming after the decision has been made).

[FN131]. See National Research Council, *supra* note 22, at 78-79, 84 (encouraging agencies to more appropriately and effectively involve interested and affected parties in deliberations); Peter B. Clark & Francis H. Cummings, Jr., Selecting an Environmental Conflict Management Strategy, in *Environmental Conflict Management* 10, 17-22 (Philip A. Marcus & Wendy M. Emrich eds., 1981).

[FN132]. Hadden, *supra* note 116, at 55; see also Scrimgeour & Hanson, *supra* note 129, at 15 (noting criticism that an advisory committee is an "expensive community participation technique"); Carl W. Tobias, Of Public Funds and Public Participation: Resolving the Issue of Agency Authority to Reimburse Participants in Administrative Proceedings, 82 *Colum. L. Rev.* 906, 952-54 (1982) (acknowledging the expense, but noting that it is less than agency budgets); Peelle, *Citizens Advisory Groups*, *supra* note 115, at 3.

[FN133]. Hadden, *supra* note 116, at 55; see also Keystone Ctr., *supra* note 125; Frank B. Cross, *The Public Role in Risk Control*, 24 *Env'tl. L.* 887, 956- 57 (1994) (noting that citizens panels are valuable in overcoming public fears).

[FN134]. See Frances M. Lynn & Jack D. Kartez, *The Redemption of Citizen Advisory Committees: A Perspective from Critical Theory*, in *Fairness and Competence in Citizen Participation*, *supra* note 62, at 87, 87-90; Anna Vari, *Citizens' Advisory Committees as a Model for Public Participation: A Multiple Criteria Evaluation*, in *Fairness and Competence in Citizen Participation*, *supra* note 62, at 103, 104-05. For several good works on the use of citizens advisory boards, especially in the siting context, see *Citizen Participation in Science Policy*, *supra* note 120, Douglas Easterling & Howard Kunreuther, *The Dilemma of Siting a High-Level Nuclear Waste Repository* 11-12, 69-80 (1995), Scrimgeour & Hanson, *supra* note 129, at 13-27, Lynn & Busenberg, *supra* note 115, and Peelle, *Citizens Advisory Groups*, *supra* note 115.

[FN135]. See Gerrard, *supra* note 22; Fiorino, *supra* note 124 (reporting on several other case studies); Lynn & Busenberg, *supra* note 115, at 147-59 (reviewing studies of 14 boards); Peelle, *Citizens Advisory Groups*, *supra* note 115.

[FN136]. See Holznagel, *supra* note 23; Mank, *supra* note 67, at 272-82 (providing a broader review of the Massachusetts "negotiated compensation" technique).

[FN137]. See Hadden, *supra* note 116, at 54.

[FN138]. See Renn et al., *supra* note 123, at 197.

[FN139]. See Keystone Ctr., *supra* note 125.

[FN140]. See Howell et al., *supra* note 116, at 19-20. Howell and his colleagues studied a number of other public participation efforts to develop the model that they tested in the Northwest. Their book presents an extremely elaborate set of 16 "Principles of Citizen Involvement" and a 33-step model for a Citizen Involvement Program. See *id.* at 21-49. The basic characteristics of the advisory groups-that they are supported by the initiator of the action, that affected persons are involved in the process, and that a governmental body makes the ultimate decision-are also the assumptions here. See *id.* at 23.

[FN141]. Office of Tech. Assessment, *supra* note 10, at 3-4; see also League of Women Voters, *The Nuclear Waste Primer* (1993); U.S. Dep't of Energy, *Closing the Circle on the Splitting of the Atom* (1995); U.S.962 Dep't of Energy, *Linking Legacies: Connecting the Cold War Nuclear Weapons Production Processes to Their Environmental Consequences* 71-93 (1997) [hereinafter U.S. DOE, *Linking Legacies*]; U.S. Dep't of Energy, *The 1996 Baseline Environmental Management Report* 4-33 (1996) [hereinafter U.S. DOE, 1996 BEMR].

[FN142]. See U.S. DOE, 1996 BEMR, *supra* note 141, at 4-1. The terms "complete" and "clean-up" are somewhat euphemistic in this context. Current plans hope to finish the bulk of the clean-up in 10 years and at a substantially lower life-cycle cost of \$117 billion, but numerous

significant projects will take longer (for example, the tanks at Hanford) and residual groundwater treatment and environmental monitoring will continue long after that. See Office of Env'tl. Management, U.S. Dep't of Energy, DOE/EM-O327, *Accelerating Cleanup: Focus on 2006*, at 4-8 tbl.4.2(b) (Discussion Draft 1997); *id.* at 4-7 to 4-12. Moreover, "clean" does not necessarily mean that the area is freely releasable to the public; for the many sites at which some contamination remains (either in situ or in a disposal facility), long-term stewardship activities must continue indefinitely. See *id.* at 1-4 to 1-5; U.S. DOE, 1996 BEMR, *supra* note 141, at 4-6 to 4-19, 6-9 to 6-10.

[FN143]. See General Accounting Office, *supra* note 46; U.S. Congressional Budget Office, *The Total Cost of Cleaning Up Non-Federal Superfund Sites* (1994); Viki Panos, Note, *Expanding the Scope of RCRA Section 6972(a)(1)(B)-A Citizen Suit Provision*, 31 Val. U. L. Rev. 191, 209 n.136 (1996).

[FN144]. See *Crawford v. National Lead Co.*, 784 F. Supp. 439, 447 (S.D. Ohio 1989) (noting that DOE had to have had knowledge of and acquiesced in a regular practice of massive violation of environmental laws by its contractor at Fernald).

[FN145]. Office of Tech. Assessment, *supra* note 10, at 139-41.

[FN146]. See FFERDC Final Report, *supra* note 10, at vii; FFERDC Interim Report, *supra* note 10, at v.

[FN147]. FFERDC Interim Report, *supra* note 10, at 19.

[FN148]. See *id.*

[FN149]. See FFERDC Final Report, *supra* note 10, at 54-59. The SSAB recommendation was not limited to DOE, but DOE embraced the recommendation most quickly and thoroughly. DOE has recently published guidance, endorsed by EPA, for the operation of SSABs. See Office of Env'tl. Management, U.S. Dep't of Energy, Office of Environmental Management Site-Specific Advisory Board Guidance (1996). The Department of Defense has established Restoration Advisory Boards (RABs) at many of its facilities with environmental contamination. See Gerald Kohns, *Restoration Advisory Boards*, Army Law., Jan. 1995, at 35. Additional information and guidance for RABs can be found at a Department of Defense website, <<http://www.dtic.mil/envirodod/rab>>. A fascinating variation on the SSAB and on the RAB was used successfully at the Air National Guard's Massachusetts Military Reservation. A deliberation-and consensus-based group of experts was convened to make recommendations on groundwater remediation issues, and the experts group itself engaged in substantial public involvement. See Edward Scher, *Consensual Approaches to Environmental Decision-Making: The Case of the Massachusetts Military Reservation*, 28 Env't Rep. (BNA) 1309 (Oct. 31, 1997). Other SSAB materials may be found at <<http://www.em.doe.gov>>.

[FN150]. FFERDC Interim Report, *supra* note 10, at 25; see also FFERDC Final Report, *supra* note 10, at 56-57.

[FN151]. See FFERDC Interim Report, *supra* note 10, at 59-60, 67-70 (listing current Environmental and Citizen Organizations with locations and phone numbers); see also FFERDC Final Report, *supra* note 10, at 24-31 (describing the operation, accountability, and funding of SSABs).

[FN152]. The Fernald facility covers about 1 square mile, while the Hanford Reservation occupies 560 square miles. At 1350 square miles, the Nevada Test Site is larger than Rhode Island.

[FN153]. See *Crawford v. National Lead Co.*, 784 F. Supp. 439, 447 (S.D. Ohio 1989) (holding DOE's contractor can be liable for damages), settled sub nom. *In re Fernald Litig.*, No. C-1-85-149, 1989 WL 267039 (S.D. Ohio Sept. 29, 1989) (order approving settlement).

[FN154]. See *Ohio v. United States Dep't of Energy*, 503 U.S. 607 (1992). The holding in the case became the basis for the Federal Facilities Compliance Act, see 42 U.S.C. §§ 6903(15), 6961 (1994), which authorized administrative actions against federal agencies and added agencies of the United States as "persons" subject to suit.

[FN155]. For general descriptions of the Task Force process, see Fernald Citizens Task Force, *Recommendations on Remediation Levels, Waste Disposition, Priorities, and Future Use* (1995); Applegate, *supra* note 34, at 1653-54; John S. Applegate & Douglas J. Sarno, *Coping with Complex Facts and Multiple Parties in Public Disputes*, Consensus, July 1996, at 1; Jennifer J. Duffield & Stephen P. Depoe, *Lessons from Fernald: Reversing NIMBYism Through Democratic Decision-Making*, Inside EPA's Risk Pol'y Rep., Feb. 21, 1997, at 31. The Task Force is now called the Fernald Citizens Advisory Board.

[FN156]. For example, it turned out that the members divided about equally between those who had a high-school education, a college degree, and professional degrees. The group was not as ethnically diverse as would have been ideal, but the Fernald site does not distinctly affect, for example, African-American or Native-American communities as other DOE sites do.

[FN157]. See Fernald Citizens Task Force, *supra* note 155, at 29-48 (listing and explaining the Task Force's recommendations). All of the recommendations were unanimous except waste disposition, as to which one member from an on-site disposal facility dissented. Another member, while not dissenting from the recommendation, believed that the estimates were unduly conservative.

[FN158]. One senior DOE official told the Presidential/Congressional Commission on Risk Assessment and Risk Management: "The department [of energy] has learned the power of having the public involved in decision-making. For example, the citizens advisory board at Fernald has dramatically changed the department's cleanup strategy at that Ohio site. The results will be a far more expeditious cleanup, with a savings of some \$2 billion compared with the cost of the department's original plans. By opening the process to meaningful public input, the department is empowered to make decisions it could never make unilaterally." 1 Presidential/Congressional Comm'n on Risk Assessment and Risk Management, Framework for

Environmental Health Risk Management 39 (1997) [hereinafter Presidential/Congressional Comm'n] (alteration added) (quoting Dr. Carol Henry, Associate Deputy Assistant Secretary for Science and Risk Policy, DOE); see also Radioactive Waste: Cleanups Consistent with Profitability of Companies, Energy Undersecretary Says, 27 Env't Rep. (BNA) 239 (May 10, 1996) (quoting Assistant Secretary Thomas Grumbly).

[FN159]. Sections B and C of this Part are loosely based on a paper published by John Applegate and others. See John Applegate et al., Fernald Citizens Task Force, The Focused SSAB: Key Issues and Activities from the Fernald Experience (Oct. 1994) (on file with author; not commercially available).

[FN160]. In legal terms, this meant reopening the CERCLA record of decision and performing a new feasibility study to determine the best remedy.

[FN161]. The nontechnical aspects of environmental issues are discussed in Applegate, *supra* note 34, at 1660-64.

[FN162]. The future use of the land determines the likely level of exposure to a contaminant, and exposure times toxic potency equals risk. See generally National Research Council, Risk Assessment in the Federal Government (1983) (establishing the basic risk-assessment paradigm). Remediation goals are set by reference to quantitative assessments of risk. See 40 C.F.R. § 300.430(e)(2)(i), (e)(9)(iii) (1996). It is DOE and EPA policy to make remedial decisions in light of the expected future use of property. See Office of Env'tl. Management & Office of Field Management, U.S. Dep't of Energy, DOE/EM-0283, Charting the Course: The Future Use Report 7-11 (1996); Directive 9355.7-04 Memorandum from Elliott P. Laws, Assistant Administrator, Office of Solid Waste and Emergency Response, EPA, to EPA Regional Directors (May 25, 1995) (presenting additional information for considering land use in making remedy selection decisions under CERCLA), publicly noticed in Land Use Directive, 60 Fed. Reg. 29,595 (1995). The role of future use and remedy selection has been described as follows: In applying risk assessment to develop cleanup levels, it is important to establish a single residual risk target to ensure a consistent level of protection of human health regardless of the land use selected. For example, achieving a 10⁻⁶ risk level in a residential scenario might require reducing all on-site concentrations of a particular contaminant to 5 ppm. In an industrial setting, 20 ppm may be all that is necessary to achieve the same level of residual risk. Though different cleanup levels are used, the same level of residual risk is achieved because exposure is controlled. Douglas J. Sarno, Future Use Considerations in the Cleanup of Federal Facilities, Hazardous Materials Control, May-June 1993, at 20, 35 (emphasis added); see also George Wyeth, Land Use and Cleanups: Beyond the Rhetoric, 26 Env'tl. L. Rep. (Env'tl. L. Inst.) 10,358 (1996).

[FN163]. Brownfields advocates, as a consequence, usually urge intensive local public involvement. See, e.g., E. Lynn Grayson & Stephen A.K. Palmer, The Brownfields Phenomenon: An Analysis of Environmental, Economic, and Community Concerns, 25 Env'tl. L. Rep. (Env'tl. L. Inst.) 10,337 (1995); Douglas A. McWilliams, Environmental Justice and Industrial Redevelopment: Economics and Equality in Urban Revitalization, 21 Ecology L.Q. 705 (1994); R. Michael Sweeney, Brownfields Restoration and Voluntary Cleanup Legislation, 2 Env'tl. Law.

[FN164]. CERCLA's public participation requirements, limited as they are, cannot legally be ignored, so an SSAB could not replace public comment on the proposed plan, even if that seemed desirable.

[FN165]. See *The Third Wave Man*, *supra* note 60, at 37-38.

[FN166]. Obviously, any decision in a local unit of the federal government is ultimately reviewable by agency headquarters in Washington, D.C., and possibly also in an intermediate regional headquarters. Where such centralized control is largely nominal, or where the central authority is equally anxious to work with local citizens, the decisionmaking power is local enough for these purposes.

[FN167]. This was the central defect of the provisions of the National Industrial Recovery Act that were struck down in *A.L.A. Schechter Poultry Corp. v. United States*, 295 U.S. 495 (1935), the last unequivocal exercise of the nondelegation doctrine. When Congress wants an agency to adopt industry standards, it is careful today to require an independent determination that the private standards meet legislative requirements. See Occupational Health and Safety Act of 1970, 29 U.S.C. § 655(a) (1994) (authorizing promulgation of national consensus standards). The Negotiated Rulemaking Act of 1990 permits agencies to negotiate the proposed, not the final, rule. See 5 U.S.C. § 561 (1994).

[FN168]. See Reich, *supra* note 4, at 1637-38.

[FN169]. At some DOE sites, one stakeholder group was formed to select the members of the SSAB. The eligibility of the selection group for membership in the SSAB is controversial and must be clearly determined in advance. Cf. Holznagel, *supra* note 23, at 362 (describing the Massachusetts process in which five statutory members for different constituencies selected the remaining members of the hazardous waste siting committees).

[FN170]. See Freeman, *supra* note 53, at 38-39, 78 (emphasizing the need for flexibility in the convening process).

[FN171]. An unplanned membership adjustment occurred early in the process when a disappointed candidate applied to the Task Force itself for membership. He persuasively argued that he represented an important point of view that was not otherwise on the board, a claim that his subsequent participation has borne out. Perritt endorses a similar process for regulatory negotiations. See Perritt, *supra* note 62, at 1689-90.

[FN172]. A "balanced" membership is required by the Federal Advisory Committee Act, see 5 U.S.C. app. § 5, and the Negotiated Rulemaking Act of 1990, see 5 U.S.C. § 564 (considering a balanced representation of interests in the committee application process).

[FN173]. See Belzer, *supra* note 101, at 171.

[FN174]. See *id.* at 173; Funk, *supra* note 62, at 61-62. The Negotiated Rulemaking Act of 1990 does not help matters: it describes the participants as "a limited number of identifiable interests that will be significantly affected." 5 U.S.C. § 563(a)(2).

[FN175]. This is a standard justification for the constitutional "case or controversy" requirement. See U.S. Const. art. III, § 2, cl. 1.

[FN176]. But see Freeman, *supra* note 53, at 84-85, 89-90 (arguing against such a dichotomy).

[FN177]. It seems trivial, but at Fernald we found that it is extremely helpful to organize meetings before or after a meal, which provides the occasion for informal discussions in a relaxed setting.

[FN178]. I regard neighbors whose property values may be affected by clean-up decisions and workers whose jobs may be affected as having an indirect interest. At some point, the need to include affected persons will conflict with the desire for objectivity. For these purposes, it is important to err on the side of inclusion, as long as biases are evident, as they are with neighbors and workers.

[FN179]. See Scrimgeour & Hanson, *supra* note 129, at 34; Tobias, *supra* note 132, at 945-47. Out-of-pocket expenses, such as travel and telephone calls, should not be subject to this prohibition.

[FN180]. Board chairs may be either appointed in the convening process or elected by the full membership. I was selected by the convener, because it was felt that an early election by the board members who did not really know each other would not necessarily choose a person with the desired neutrality. If a "partisan" were elected, it could have (and has in other cases) led to early dissatisfaction by members whose candidate was not elected. An alternative adopted at some DOE sites is to elect an interim chair for organizational purposes, with the clear understanding that the post is temporary.

[FN181]. See Funk, *supra* note 62, at 79-81; Perritt, *supra* note 62, at 1659, 1690. In *USA Group Loan Services, Inc. v. Riley*, 82 F.3d 708, 714 (7th Cir. 1996), discussed above, the Department of Education promised the negotiating group that it would abide by any consensus they reached unless there were "compelling" reasons to depart from it. *Id.*

[FN182]. The Act specifies negotiation of a proposed rule, which then must go through the regular APA process of finalization. See Negotiated Rulemaking Act of 1990, 5 U.S.C. § 561 (1994). It further provides that no extra deference is to be given to a negotiated rule in judicial review. See *id.* § 570.

[FN183]. *Id.* §§ 553(c), 555(e), 557(c).

[FN184]. *Id.* § 552(a).

[FN185]. 42 U.S.C. §§ 9617(b)-(c), 9620(f) (1994).

[FN186]. CERCLA technical assistance grants are often used for this purpose.

[FN187]. See Freeman, *supra* note 53, at 80.

[FN188]. Federal facilities present the further justification for intensive public participation because they involve the disposition of public property.

[FN189]. This argument has also been made, albeit with inconclusive empirical support, for regulatory negotiation. See Freeman, *supra* note 53, at 24-25. The Task Force spent about \$250,000 per year on support and administrative costs. This compares favorably with the \$2 billion that it saved in clean-up costs.

[FN190]. See Pildes & Sunstein, *supra* note 128, at 99-111; Reich, *supra* note 4, at 1625-27; Sunstein, *Democratizing America*, *supra* note 6, at 961-75; see also Carnegie Comm'n, *supra* note 21, at 89 (noting the goal of public participation is to solicit an "informed judgment").

[FN191]. Some of the techniques that the Task Force used are described in Applegate & Sarno, *supra* note 155, and John S. Applegate & Douglas J. Sarno, *Futuresite: An Environmental Remediation Game-Simulation, Simulation & Gaming*, Mar. 1997, at 13, 14-15.

[FN192]. 42 U.S.C. § 4332(2)(C) (1994).

[FN193]. See 1 John Doble & Jean Johnson, *Kettering Found., Science and the Public* 7-9 (1990). This approach has the further advantage of putting the public in the decisionmaker's shoes, that is, asking them to experience-though not necessarily accept-the constraints under which public officials operate. See *id.*

[FN194]. Cf. M. Granger Morgan Baruch Fischhoff et al., *Communicating Risk to the Public*, 26 *Env'tl. Sci. & Tech.* 2048, 2050 (1992) (arguing that quantitative expressions of risk are not particularly helpful to lay persons in making sound risk choices).

[FN195]. This is true only after the initial proposal, however. In rulemaking, regular participants in the regulatory process have opportunities to influence the initial proposal, which are effective but unevenly distributed. See *supra* text accompanying notes 102-08.

[FN196]. See *supra* text accompanying note 93.

[FN197]. The Negotiated Rulemaking Act of 1990 specifies unanimity as the meaning of consensus in the absence of the negotiators' agreement to adopt another definition of consensus. See 5 U.S.C. § 562(2) (1994).

[FN198]. This point is emphasized in Office of Env'tl. Management, *supra* note 149, § 2.0. At Fernald, these methods included mailings, a public reading room, announcements of the

availability of key documents, regular community meetings, special meetings, workshops, and a one-on-one "envoy" program to community leaders. Obviously, this range of activity exceeds the needs of many public decisions.

[FN199]. Cf. Siegler, *supra* note 72, at 10,648-49 (stating that much of the work of regulatory negotiations takes place during private coalition-building outside of the public sessions).

[FN200]. Cf. Perritt, *supra* note 62, at 1639 (noting that closed meetings tend to disadvantage those parties that lack significant staff and financial resources).⁹⁶⁴

[FN201]. Cf. 40 C.F.R. § 300.430(f)(3)(i)(D) (1996) (requiring that public meetings be held "at or near the site at issue").

[FN202]. This is also a requirement of the Federal Advisory Committee Act. See 5 U.S.C. app. § 10.

[FN203]. See Administrative Procedure Act, 5 U.S.C. §§ 553(c), 555(e), 557(c)(3).

[FN204]. William Funk argues that it is, in fact, predictably unreliable, since it is usually putting an apparently public-spirited justification on a dickered accommodation among special interests. See Funk, *supra* note 62, at 79- 81.

[FN205]. Frank Cross, for example, is skeptical of its value. See Cross, *supra* note 133, at 892-93, 899-904.

[FN206]. It is often argued, for example, that the public has a more intimate knowledge of local health effects than outsiders. See Sheldon Krimsky, *Epistemic Considerations on the Value of Folk-Wisdom in Science and Technology*, 3 *Pol'y Stud. Rev.* 246, 246-62 (1984); Richard J. Lazarus, *Pursuing "Environmental Justice": The Distributional Effects of Environmental Protection*, 87 *Nw. U. L. Rev.* 787, 812-14 (1993); see also Freeman, *supra* note 53, at 63 (observing that local stakeholders were interested in issues that the company and EPA "had never considered"). At the Hanford site, for example, traditional basketmaking by local Native-American tribes involved a route of exposure to soil and water contamination (through working with reeds) that would never have occurred to risk assessors without public participation.

[FN207]. Specifically, it provides accountability for the actions of unelected governmental officials in a democratic government. In the context of judicial review, Judge Leventhal characterized it as the price for delegating broad powers to agencies. See *Ethyl Corp. v. EPA*, 541 F.2d 1, 68-69 (D.C. Cir. 1976) (en banc) (Leventhal, J., concurring); see also Freeman, *supra* note 53, at 30-31, 87-89 (emphasizing the importance of clear agency accountability for decisions).

[FN208]. See Applegate, *supra* note 34, at 1652-53; John S. Applegate, *Worst Things First: Risk, Information, and Regulatory Structure in Toxic Substances Control*, 9 *Yale J. on Reg.* 277,

299-304 (1992).

[FN209]. See, e.g., Richard H. Pildes, *The Unintended Cultural Consequences of Public Policy: A Comment on the Symposium*, 89 Mich. L. Rev. 936, 957-64 (1991) (emphasizing the relevance of values to public participation in risk issues); Pildes & Sunstein, *supra* note 128, at 52-63 (summarizing the literature on lay and expert perceptions of risk).

[FN210]. See Michael J. Sandel, *Democracy's Discontent* 4-6 (1996); Daniel J. Fiorino, *Technical and Democratic Values in Risk Analysis*, 9 Risk Analysis 293, 296-97 (1989).

[FN211]. 1 Presidential/Congressional Comm'n, *supra* note 158, at 18; see also National Research Council, *supra* note 22, at 79-82; Michael P. Healy, *The Effectiveness and Fairness of Superfund's Judicial Review Preclusion Provision*, 15 Va. Envtl. L.J. 271, 343-44 (1995-96) (basing summaries on interviews with participants in the administrative process).

[FN212]. Another version of this issue is the debate over whether to create a "science" or "administrative" court (by analogy to the Tax Court) to deal with review of agency decisions in technical areas. The arguments for and against this idea have been thoroughly and recently reviewed by Professors Bruff and Revesz, and they do not need to be restated here. See Harold H. Bruff, *Specialized Courts in Administrative Law*, 43 Admin. L. Rev. 329 (1991); Richard L. Revesz, *Specialized Courts and the Administrative Lawmaking System*, 138 U. Pa. L. Rev. 1111 (1990); see also *The Environmental Court Proposal: Requiem, Analysis, and Counterproposal*, 123 U. Pa. L. Rev. 676 (1975). Proponents of such specialized courts point to the technical complexity of the issues and the difficulty that nonscientists have in understanding them: nonscientists may simply muddle things, or they may focus on minor or irrelevant points to the exclusion of really important issues. Sheila Jasanoff offers an extreme example. Largely ignoring the technical issues in a case that featured experts on either side of a scientific question, the judge focused on their credibility based on the relative quality of the experts' courtroom demeanor. See Sheila Jasanoff, *Science at the Bar* 54-55 (1995). Congress, for its part, has rarely been persuaded to abandon generalist judicial review.

[FN213]. See Harold Leventhal, *Environmental Decisionmaking and the Role of the Courts*, 122 U. Pa. L. Rev. 509 (1974).

[FN214]. See *id.* at 517-18. From the asbestos industry's point of view, this is precisely what happened in *Corrosion Proof Fittings v. EPA*, 947 F.2d 1201 (5th Cir. 1991). EPA was so focused on its anti-asbestos legislative mandate and its extrapolations of health effects that it ignored collateral harms from its regulations (for example, increased traffic accidents from braking failures) that outweighed the asbestos-linked disease. See *id.* at 1224. The court's criticism of EPA is defended in Edward C. Warren & Gary E. Marchant, "More Good than Harm": A First Principle for Environmental Agencies and Reviewing Courts, 20 Ecology L.Q. 379, 410-18 (1993). This issue was also the subject of the D.C. Circuit's celebrated debate, in *Ethyl Corp.* and elsewhere, between Judges Bazelon, Leventhal, and Wright on what came to be known as "hard look" review. See *Ethyl Corp. v. EPA*, 541 F.2d 1, 34-36 (D.C. Cir. 1976) (*en banc*); *International Harvester Co. v. Ruckelshaus*, 478 F.2d 615, 650-52 (D.C. Cir. 1973).

(Bazelon, C.J., concurring in result); Leventhal, *supra* note 213, at 511. Judge Bazelon argued for a limited judicial role, observing that he only really knew that he did not know about the details of "dynamometer extrapolations" and other technical matters. *International Harvester*, 478 F.2d at 650-52 (Bazelon, C.J., concurring in result). But the Leventhal-Wright view prevailed that day, and has by and large since, that with diligent effort judges are perfectly capable of absorbing the necessary information and understanding. On the present D.C. Circuit, Judge Wald has been a prolific and eloquent speaker for the courts' technical abilities. See *Sierra Club v. Costle*, 657 F.2d 298, 410 (D.C. Cir. 1981); Patricia M. Wald, *The Role of the Judiciary in Environmental Protection*, 19 B.C. Env'tl. Aff. L. Rev. 519, 532-34 (1992). Other judges, less judiciously, have taken upon themselves the task of deciding what is "good science." See *Gulf S. Insulation v. United States Consumer Prod. Safety Comm'n*, 701 F.2d 1137 (5th Cir. 1983). Like the model of the senior decisionmaker suggested above, the court need not become an expert to render an informed decision. See *supra* Part III.B.4; see also *Ethyl Corp.*, 541 F.2d at 36 (distinguishing between the information needs of technical experts and their generalist reviewers).

[FN215]. Wald, *supra* note 214, at 532. The requirement of explanation is most apparent in cases where the agency has changed its views. The courts clearly recognize the propriety of such changes based on new circumstances or new administrations, see *Motor Vehicles Mfrs. Ass'n v. State Farm*, 463 U.S. 29, 42-44 (1983); *Greater Boston Television Corp. v. FCC*, 444 F.2d 841, 852 (D.C. Cir. 1970), but they are also aware of changes that are simply politically expedient. See *Motor Vehicles Mfrs. Ass'n*, 463 U.S. at 58-59 (Rehnquist, J., concurring).

[FN216]. See Pedersen, *supra* note 13, at 60: It is a great tonic to a program to discover that even if a regulation can be slipped or wrestled through various layers of . . . review, . . . a circuit court of appeals will inquire into the minute details of methodology, data sufficiency and test procedures and will send the regulations back if these are lacking.

[FN217]. See *Scenic Hudson Preservation Conference v. FPC*, 354 F.2d 608 (2d Cir. 1965).

[FN218]. *Id.* at 611-12.

[FN219]. See *id.* at 620-25.

[FN220]. See Leventhal, *supra* note 213, at 515-17, 523-24, 531; see also James Q. Wilson, *Bureaucracy* 72-74 (1989) (recounting how the power generation culture and mission of the Tennessee Valley Authority crowded out legally mandated environmental concerns).

[FN221]. See Breyer & Stewart, *supra* note 27, at 369; see also Bruce A. Ackerman & William T. Hassler, *Clean Coal/Dirty Air* 13 (1981); Diver, *supra* note 31, at 424. Breyer's more recent *Vicious Circle* discusses a different aspect of tunnel vision, involving the tendency of an agency, focusing on a single mission, to take its actions to their extremes. Stephen Breyer, *Breaking the Vicious Circle* 11-19 (1993).

[FN222]. See Bruff, *supra* note 212, at 331. Judge Wright in *Ethyl Corp.* spoke of the need to "take a step back from the agency decision." *Ethyl Corp. v. EPA*, 541 F.2d 1, 36 (D.C. Cir. 1976)

(en banc).

[FN223]. In the NEPA context, for example, the environmental impact statement is the basis for both judicial and public review of the agency's assumptions and logic. See A. Dan Tarlock, *Balancing Environmental Considerations and Energy Demands: A Comment on Calvert Cliffs' Coordinating Committee, Inc. v. AEC*, 47 Ind. L.J. 645, 668-69 (1972).

[FN224]. See 40 C.F.R. § 300.430(a)(1)(ii)(A) (1996).

[FN225]. One commentator aptly recasts the familiar "ADR" acronym as "appropriate dispute resolution," instead of "alternative dispute resolution," to emphasize the importance of choosing the best process for the particular situation. Ann L. MacNaughton, *Collaborative Problem-Solving in Environmental Dispute Resolution*, Nat. Resources & Env't, Summer 1996, at 3, 3 (emphasis in original). MacNaughton 965 also suggests a number of criteria for selection of a productive collaborative process. See *id.* at 6, 70.

[FN226]. The process is called the National Dialogue on Nuclear Material and Waste and at this writing it is still in the planning stages. Further information can be obtained from the League of Women Voters website. See League of Women Voters Educ. Fund, *National Dialogue on Nuclear Material and Waste* (last modified June 26, 1997) <<http://www.lwv.org/nuke/about.html>>.

[FN227]. I refer here to internal qualities, that is, qualities of the process itself. External qualities, such as effectiveness in reaching agreement or improving decisions, have already been considered.

[FN228]. Once participation is offered and made possible, the sponsor has fulfilled its obligations of inclusiveness, at least in terms of the process. No form of public participation can allow itself to be held hostage by the nonparticipation or threat of nonparticipation by a stakeholder group. To do so creates a kind of veto, which is antithetical to the deliberative nature of the group, and it is unfair to others who are willing to work collaboratively. On the other hand, the political reality may be that the holdout's participation is politically necessary, and this may be a reason to choose another type of procedure (perhaps enhanced review-and-comment) for the particular decision.

[FN229]. Wald, *supra* note 214, at 534.

[FN230]. Leventhal, *supra* note 213, at 512 (quoting *Greater Boston Television Corp. v. FCC*, 444 F.2d 841, 851 (D.C. Cir. 1970)). [FN231]. Christopher Peters has recently argued that judicial adjudication can be understood as a form of democratic lawmaking to the extent that the litigants actively participate in the decisionmaking, subsequently bound parties are similarly situated to the litigants, and the litigants had the capability of meaningful participation. See Christopher J. Peters, *Adjudication as Representation*, 97 Colum. L. Rev. 312, 375-77 (1997). These parallel, respectively, the above qualities of involvement, representation, and openness.

[FN232]. Much of risk assessment, for example, is a matter of uncertainty, judgments, and assumptions. See National Research Council, *Science and Judgment in Risk Assessment* (1994). That does not render such assessments necessarily invalid, but the uncertainty, judgments, and assumptions must be fully disclosed to the users of the analyses. See National Research Council, *supra* note 22, at 142-45; 2 Presidential/ Congressional Comm'n, *supra* note 158, at 88-91.

[FN233]. See, e.g., 15 U.S.C. § 2618(a)(3) (1994) (TSCA record); 42 U.S.C. § 7607(d)(2)-(6) (1994) (Clean Air Act rulemaking docket).

[FN234]. See 42 U.S.C. § 9617(e).

[FN235]. This is to some extent what the National Research Council and the Presidential/ Congressional Commission recommended for involving the public in risk analysis. Risk assessment and management are multistage processes, and the Council and Commission recommend returning to the public before and after each stage. See National Research Council, *supra* note 22, at 27-35; 2 Presidential/Congressional Comm'n, *supra* note 158, at 7-37.

[FN236]. EPA's management of the dioxin reassessment represents the usual approach to public participation in technical issues (and the dioxin reassessment was extraordinarily technical). Dialogic "workshops" were held for peer reviewers (i.e., other experts), see EPA, Reassessment of 2,3,7,8 TCDD, 59 Fed. Reg. 46,980, 46,981-82 (1994), and EPA's Science Advisory Board, see EPA, Notice of SAB Dioxin Reassessment Review Committee Meeting, 60 Fed. Reg. 19,251 (1995), but the general public was limited to observing the workshops, submitting written comments, and five-minute oral presentations at hearings. See EPA, Public Meetings on Draft Reassessment of Dioxin, 59 Fed. Reg. 59,776, 59,777.

[FN237]. See EPA, Advance Notice of Proposed Rulemaking, Implementation of Revised Ozone and Particulate Matter Standards, 61 Fed. Reg. 65,764 (1996); EPA, Advance Notice of Proposed Rulemaking, National Ambient Air Quality Standards for Ozone and Particulate Matter, 61 Fed. Reg. 29,719. The final regulations were promulgated in EPA, National Ambient Air Quality Standards for Particulate Matter, 62 Fed. Reg. 38,652 (1997) (to be codified at 40 C.F.R. pt. 50).

[FN238]. See Freeman, *supra* note 53, at 77-78, 84-85; see also Croley & Funk, *supra* note 63, at 499-500, 531 (emphasizing the need for a balance of views in advisory committees).

[FN239]. Since this is likely to be an expensive proposition and the obligation will fall disproportionately on public interest groups, the sponsoring agency should shoulder most of this burden, because it is ultimately the agency's responsibility to ensure broad public participation.

[FN240]. See Perritt, *supra* note 62.

[FN241]. See Funk, *supra* note 62, at 79-84.
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